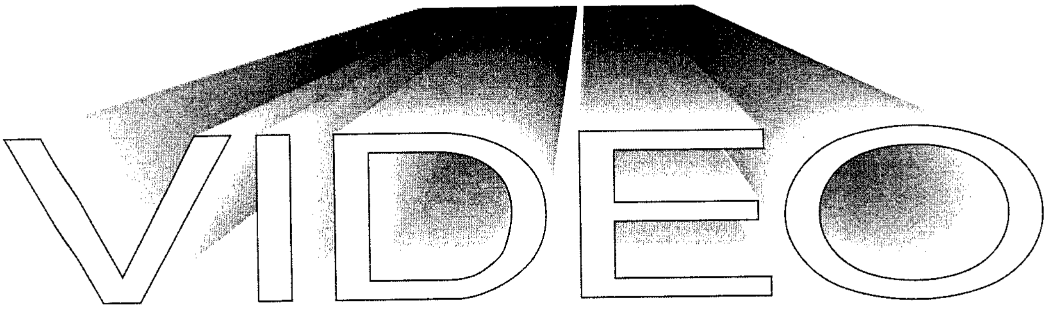
BLAUPUNKT
Bosch Telecom

Magnétoscope
RTV-921 PSW
7 618 836

Kundendienstschrift · Notice d'accompagnement

MC/VKD 1 D92 424 011



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ET-Liste zur Explo Nr. 1
Liste de pièces de rechange de vue éclatée No. 1

Lfd. Nr. No. dans le dessin	Bestell-Nr. No. de cde.
5	8 619 416 100
6	8 619 510 318
7	8 619 510 408
8	8 940 599 702
9	8 619 510 170
10	8 619 416 802
11	8 619 419 150
12	8 619 414 631
13	8 619 414 206
14	8 619 419 325
15 0,5 mm	8 619 417 411
15 0,3 mm	8 619 417 412
15 0,2 mm	8 619 417 413
17	8 619 434 602
18	8 619 419 151
20	8 619 414 409
23	8 619 429 208
24	8 619 419 152
25	8 619 419 153
26	8 619 414 633
27	8 619 419 154
28	8 619 510 319
29	8 619 590 722
31	8 619 417 520
32	8 619 316 604
33	8 619 312 507
34	8 619 530 637
35	8 619 414 554
36	8 619 419 504
37	8 619 419 157
38	8 619 414 634
39	8 619 530 461
40	8 619 414 635
41	8 619 414 555
42	8 619 417 521
43	8 619 414 369
44	8 619 417 235
45	8 619 419 321
46	8 619 419 610
47	8 619 419 159
48	8 619 414 637
49	8 619 416 103
50	8 619 510 314
51	8 619 416 307
52	8 619 212 560
53	8 619 510 421
54	8 619 510 630
55	8 619 520 224
57	8 619 510 320
58	8 619 510 422
59	8 619 520 473
60	8 619 414 218
61	8 619 419 326
62	8 619 510 353
63	8 619 414 220
64	8 619 417 363
65	8 619 414 344
66	8 619 429 501
67	8 619 414 221
68	8 619 419 100
70	8 619 419 611
71	8 619 419 324
72	8 619 414 223
74	8 619 416 801
75	8 619 416 500
76	8 619 417 522
78	8 619 419 600
79	8 619 510 171
80	8 619 419 149
84	8 619 417 183
85	8 619 510 345
86	8 619 510 315
87	8 619 419 160
88	8 619 419 161
89	8 619 419 328
90	8 619 419 162
92	8 619 419 164
93	8 619 580 294
94	8 619 419 165
95	8 619 510 498
96	8 619 429 406
97	8 619 510 409
98	8 619 499 708
99	8 619 499 706

ET-Liste zur Explo Nr. 2
Liste de pièces de rechange de vue éclatée No. 2

Lfd. Nr. No. dans le dessin	Bestell-Nr. No. de cde.
100	8 619 414 409
101	8 619 419 612
103	8 619 419 166
104	8 619 419 167
105	8 619 419 168
106	8 619 414 642
107	8 619 419 169
108	8 619 419 331
109	8 619 416 126
110	8 619 414 229
111	8 619 419 319
112	8 619 414 352
113	8 619 414 357
114	8 619 416 309
115	8 619 414 354
116	8 619 419 317
117	8 619 414 643
118	8 619 414 358
119	8 619 414 346
120	8 619 414 351
121	8 619 411 402
122	8 619 414 230
123	8 619 414 231
124	8 619 414 644
125	8 619 414 232
127	8 619 419 322
128	8 619 419 332
129	8 619 414 233
130	8 619 414 234
131	8 619 414 235
132	8 619 417 910
133	8 619 414 366
135	8 619 429 405
136	8 619 416 105
137	8 619 419 323
138	8 619 419 318
139	8 619 414 645
140	8 619 414 236
141	8 619 419 333
142	8 619 419 315
143	8 619 416 313
144	8 619 419 171
145	8 619 414 238
146	8 619 419 316
147	8 619 419 191
148	8 619 434 600
149	8 619 416 613
151	8 619 419 334
152	8 619 419 335
153	8 619 419 172
154	8 619 419 173
155	8 619 419 407
156	8 619 419 336
157	8 619 419 904
158	8 619 419 147
159	8 619 419 903
160	8 619 419 174
161	8 619 419 500
162	8 619 419 501

ET-Liste zur Explo Nr. 3
Liste de pièces de rechange de vue éclatée No. 3

Lfd. Nr. No. dans le dessin	Bestell-Nr. No. de cde.
201	8 619 416 127
202	8 619 530 464
216	8 619 520 474
218	8 619 414 242
219	8 619 419 180
221	8 619 520 225
229	8 619 419 305
230	8 619 419 613
231	8 619 417 222
232	8 619 417 223
233	8 619 419 614
234	8 619 414 244
235	8 619 408 037
236	8 619 316 623
240	8 619 416 128

ET-Liste zur Explo Nr. 4
Liste de pièces de rechange de vue éclatée No. 4

Lfd. Nr. No. dans le dessin	Bestell-Nr. No. de cde.
300	8 619 520 475
301	8 619 510 069
303	8 619 319 505
307	8 619 500 075
308	8 619 500 076
309	8 619 510 507
310	8 619 419 014
311	8 619 419 012
312	8 619 419 013
313	8 619 510 346
314	8 619 419 182
315	8 619 419 615
316	8 619 580 115
321	8 619 419 337
330	8 619 500 082
331	8 619 419 616
332	8 619 500 084
333	8 619 500 085
334	8 619 500 034
341	8 619 510 804
342	8 619 500 086
350	8 619 510 174
352	8 619 418 601
356	8 619 510 093

Ersatzteilliste

Position Position	Bezeichnung Désignation	Bestell-Nr. No. de cde.
	Wichtige mechanische Bauteile Composants mécaniques importants	
1	Kopftrommel Moteur de têtes	8 619 510 318
2	Kopfscheibe Têtes rotatives	8 619 510 408
3	Capstan Rotor Rotor de cabestan	8 619 414 366
4	Capstan Stator Stator de cabestan	8 619 429 405
5	Tuner Tuner	8 619 530 421
6	HF-Konverter Convertisseur HF	8 619 530 408
7	Netzeingangsbuchse Prise d'entrée secteur	8 619 427 649
8	Netzkabel Cordon d'alimentation secteur	8 619 496 701
9	Antennenkabel Câble d'antenne	8 619 496 700
10	Adapterkabel ANT Câble adaptateur ANT	8 619 399 703
11	Adapterkabel TV Câble adaptateur TV	8 619 399 704
12	NF-Kabel Câble audio	8 619 396 700
13	S-VHS-Verbindungskabel Câble S-VHS	8 619 590 785
14	IR-Fernbedienung Télécommande à infrarouge	8 619 590 842
15	Strichcode-Lesestift Lecteur Code Barres	8 619 590 843
16	Programmiertabelle Plaquette de programmation	8 619 590 012

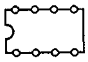
Liste de pièces de rechange

Position Position	Bezeichnung Désignation	Bestell-Nr. No. de cde.
	Hauptplatine Platine principale	
1	Abdeckplatte Plaque de recouvrement (ANT)	8 619 510 093
2	Abdeckung Couvercle (AV)	8 619 520 613
3	Schalterknopf Bouton de commande	8 619 411 027
4	Folienleiterbahn (18 pol.) Nappe souple (à 18 broches)	8 619 590 722
5	Folienleiterbahn Nappe souple (P 7503 - P 7403)	8 619 580 329
6	Folienleiterbahn Nappe souple (P 7509 - P 7405)	8 619 580 330
7	Folienleiterbahn Nappe souple (P 7502 - P 7402)	8 619 580 331
8	Folienleiterbahn Nappe souple (P 7501 - P 7401)	8 619 580 332
9	Folienleiterbahn Nappe souple (P 7506 - P 7404)	8 619 580 333
10	Folienleiterbahn Nappe souple (P 6002 - P 1503)	8 619 580 334
C 741		8 943 995 067
C 749		8 943 995 067
C 833	20 pF	8 943 995 060
C 1003	1 F 5,5 V	8 943 499 058
D 701	MA 856	8 945 406 148
D 703	MA 856	8 945 406 148
D 704	MA 856	8 945 406 148
D 705	MA 856	8 945 406 148
D 707	MA 856	8 945 406 148
D 708	MA 856	8 945 406 148
D 710	MA 3056 M	8 945 405 390
D 711	MA 3100 L	8 945 405 724
D 771	MA 151 WK	8 945 405 317
D 772	MA 29 W-AB	8 945 406 387
D 773	MA 151 K	8 945 405 226
D 780	1 SS 254	8 945 405 979
D 781	MA 151 WK	8 945 405 317
D 782	MA 151 K	8 945 405 226
D 801	MA 151 K	8 945 405 226
D 802	MA 151 WA	8 945 405 707
D 803	MA 151 K	8 945 405 226
D 1001	AK 04	8 945 405 929
D 1003	MA 723 VT	8 925 405 557
D 1004	MA 723 VT	8 925 405 557
D 1010	MA 165 VT	8 945 406 279

Ersatzteilliste

Position Position	Bezeichnung Désignation	Bestell-Nr. No. de cde.
D 1011	MA 165 VT	8 945 406 279
D 1012	MA 204 WK	8 945 406 062
D 1014	MA 204 WK	8 945 406 062
D 1015	MA 165 VT	8 945 406 279
D 1016	MA 4091	8 905 406 163
D 2201	MA 165 VT	8 945 406 279
D 2202	MA 165 VT	8 945 406 279
D 2203	MA 165 VT	8 945 406 279
D 2204	MA 165 VT	8 945 406 279
D 2205	MA 4056 M	8 945 405 720
D 2212	MA 165 VT	8 945 406 279
D 2216	MA 165 VT	8 945 406 279
D 2217	MA 165 VT	8 945 406 279
D 2301	MA 165 VT	8 945 406 279
D 2302	MA 165 VT	8 945 406 279
D 2303	MA 165 VT	8 945 406 279
D 2304	MA 165 VT	8 945 406 279
D 2306	MA 165 VT	8 945 406 279
D 2307	MA 165 VT	8 945 406 279
D 3001	MA 165 VT	8 945 406 279
D 3002	MA 165 VT	8 945 406 279
D 3003	MA 165 VT	8 945 406 279
D 3004	MA 723 VT	8 925 405 557
D 3006	MA 165 VT	8 945 406 279
D 3301	MA 151 K	8 945 405 226
D 3302	MA 3091 M	8 945 406 120
D 3306	MA 151 K	8 945 405 226
D 3901	MA 165 VT	8 945 406 279
D 3902	LN 28 RCP	8 945 406 146
D 4003	MA 165 VT	8 945 406 279
D 4101	MA 165 VT	8 945 406 279
D 4104	MA 165 VT	8 945 406 279
D 4108	MA 4047 M	8 945 406 121
D 4202	MA 165 VT	8 945 406 279
D 4501	MA 151 WK	8 945 405 317
D 5001	MA 151 K	8 945 405 226
D 6001	MA 165 VT	8 945 406 279
D 6003	MA 165 VT	8 945 406 279
D 6004	MA 165 VT	8 945 406 279
D 6005	11 ES 1	8 945 405 679
D 6007	MA 165 VT	8 945 406 279
D 6008	MA 165 VT	8 945 406 279
D 6009	MA 165 VT	8 945 406 279
D 6010	MA 165 VT	8 945 406 279
D 6011	MA 165 VT	8 945 406 279
D 6012	MA 165 VT	8 945 406 279
D 6013	MA 165 VT	8 945 406 279
D 6014	MA 165 VT	8 945 406 279
D 6015	MA 165 VT	8 945 406 279
D 6016	MA 165 VT	8 945 406 279
D 6017	MA 4091 M	8 945 405 737
D 6019	MA 165 VT	8 945 406 279
D 6020	MA 165 VT	8 945 406 279
D 6021	MA 165 VT	8 945 406 279
D 6022	MA 165 VT	8 945 406 279
D 6025	AK 04	8 945 405 929
D 6026	MA 165 VT	8 945 406 279
D 6027	MA 4075 M	8 945 421 226
D 6029	MA 204 WK	8 945 406 062
D 6032	MA 165 VT	8 945 406 279
D 6033	MA 723 VT	8 925 405 557
D 6035	MA 206	8 925 421 556
D 6036	MA 206	8 925 421 556
D 6037	MA 206	8 925 421 556
D 6038	MA 206	8 925 421 556

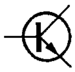
Liste de pièces de rechange

Position Position	Bezeichnung Désignation	Bestell-Nr. No. de cde.
D 7308	MA 4091 M	8 945 405 737
D 7309	MA 29 TA	8 945 406 147
D 7311	MA 151 K	8 945 405 226
D 7380	MA 151 K	8 945 405 226
D 7381	MA 151 K	8 945 405 226
D 7382	MA 151 K	8 945 405 226
D 7383	MA 151 K	8 945 405 226
D 7901	MA 151 K	8 945 405 226
D 7902	MA 151 K	8 945 405 226
D 7903	MA 151 K	8 945 405 226
D 8301	MA 151 K	8 945 405 226
D 8303	MA 151 WK	8 945 405 317
DL 801		8 619 488 302
DL 8301		8 619 484 301
F 1101	1,6 A 250 V	8 619 481 003
F 1102	1,6 A 250 V	8 619 481 003
FL 301		8 619 530 020
FL 302		8 619 434 045
FL 303		8 619 439 003
FL 304		8 619 431 021
FL 801		8 619 332 075
FL 851		8 619 530 042
FL 3301		8 619 434 039
FL 3302		8 619 530 021
FL 4501		8 619 436 016
FL 4502		8 619 436 016
FL 4503		8 619 439 047
FL 5001		8 619 439 000
FL 5002		8 619 530 022
FL 5003		8 619 439 002
FL 5004		8 619 530 022
		
IC 301	VEFH 07 C	8 945 902 797
IC 302	M 52055 FP	8 945 902 337
IC 303	VEFH 05 BT	8 945 902 798
IC 304	NJM 2233 BMA	8 945 902 799
IC 701	M 52040 SP	8 945 903 405
IC 801	VCR 0284	8 945 903 000
IC 802	NJM 2233 BMA	8 945 902 799
IC 851	BA 7025 L	8 945 900 368
IC 2201	AN 3726 K	8 945 902 432
IC 2202	MN 4013 BS	8 945 902 387
IC 2203	MN 1280 R	8 945 901 010
IC 2204	UPD 4052 BG	8 945 903 148
IC 2205	MN 6742 VCMK	8 945 903 001
IC 2206	BA 6435 S	8 945 902 436
IC 2301	LM 358 PS	8 945 903 002
IC 2302	MN 4066 BS	8 945 901 068
IC 2303	UPC 393 G 2	8 945 902 120
IC 3001	M 52055 FP	8 945 902 337

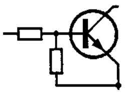
Ersatzteilliste

Liste de pièces de rechange

Position Position	Bezeichnung Désignation	Bestell-Nr. No. de cde.
IC 3301	AN 3495 K	8 945 902 431
IC 3302	MSM 6871 RS	8 945 903 003
IC 3307	BA 7004	8 905 956 752
IC 3901	M 51292 FP	8 945 903 004
IC 3902	M 52055 FP	8 945 902 337
IC 3903	M 52055 FP	8 945 902 337
IC 3904	BU 5747	8 945 903 094
IC 3905	VCR 0281	8 945 902 758
IC 4001	XRA 7766 AS	8 925 900 548
IC 4101	RC 4560 DD	8 945 902 211
IC 4501	BA 7700 K 1	8 945 902 438
IC 4502	UPC 78 L 05 J	8 945 902 073
IC 4901	M 51293 FP	8 945 903 005
IC 4902	UPC 78 L 06 J	8 945 902 450
IC 5001	M 52054 SP	8 945 903 007
IC 5002	AN 6308 S	8 945 903 008
IC 6001	MN 188166 VHS	8 945 903 009
IC 6002	MN 1280 R	8 945 901 010
IC 6003	MC 14011 BF	8 945 903 010
IC 6004	LM 339 N	8 905 955 767
IC 6005	AN 6609 N	8 945 903 011
IC 6006	LM 393 PS	8 945 902 351
IC 6007	MC 14519 BF	8 945 903 012
IC 7302	UPC 1167 C 2	8 945 900 898
IC 7304	MN 4011 BS	8 945 900 893
IC 7652	AN 5043	8 945 901 989
IC 7653	MN 4066 BS	8 945 901 068
IC 7901	UPD 4011 BG	8 945 901 029



Position Position	Bezeichnung Désignation	Bestell-Nr. No. de cde.
Q 301	2 SD 601	8 925 820 030
Q 302	2 SC 2295 * MSC 2295	8 945 705 490
Q 703	2 SD 601-S * MSD 601-S	8 925 705 436
Q 704	2 SC 3311-S	8 945 706 164
Q 705	2 SD 1992	8 945 706 028
Q 712	2 SD 1994	8 945 706 029
Q 713	2 SD 1328	8 925 820 031
Q 750	2 SD 601-S * MSD 601-S	8 925 705 436
Q 771	2 SD 601-S * MSD 601-S	8 925 705 436
Q 772	2 SD 601-S * MSD 601-S	8 925 705 436
Q 790	2 SD 1328	8 925 820 031
Q 801	2 SB 709-Q	8 925 820 033
Q 804	2 SD 601	8 925 820 030
Q 1001	2 SC 4024 LF	8 945 705 899
Q 1002	2 SD 601	8 925 820 030
Q 1003	2 SD 601 A * MSD 601	8 945 705 745
Q 1005	2 SD 1996-S	8 945 706 078
Q 2201	2 SD 601	8 925 820 030
Q 2202	2 SC 2295 * MSC 2295	8 945 705 490
Q 2203	2 SD 602 * MSD 602	8 945 705 929
Q 2204	2 SD 601	8 925 820 030
Q 2205	2 SD 601	8 925 820 030
Q 2206	2 SD 601	8 925 820 030
Q 2207	2 SD 601	8 925 820 030
Q 2208	2 SD 601	8 925 820 030
Q 2209	2 SD 601	8 925 820 030
Q 2301	2 SD 601	8 925 820 030
Q 3001	2 SD 602 * MSD 602	8 945 705 929
Q 3002	2 SD 1306	8 945 705 590
Q 3006	2 SD 601	8 925 820 030
Q 3007	2 SD 601	8 925 820 030
Q 3008	2 SC 2295 * MSC 2295	8 945 705 490
Q 3009	2 SB 709-R	8 925 705 439
Q 3301	2 SC 2295 * MSC 2295	8 945 705 490
Q 3302	2 SC 2295 * MSC 2295	8 945 705 490
Q 3303	2 SC 2295 * MSC 2295	8 945 705 490
Q 3304	2 SC 2295 * MSC 2295	8 945 705 490
Q 3310	2 SC 2295 * MSC 2295	8 945 705 490
Q 3901	2 SB 644	8 905 705 543
Q 3902	2 SB 709	8 925 705 104
Q 4001	2 SD 1992 A	8 945 705 901
Q 4103	2 SD 1328	8 925 820 031
Q 4201	2 SD 1306	8 945 705 590
Q 4202	2 SD 1306	8 945 705 590
Q 4203	2 SD 1306	8 945 705 590
Q 4204	2 SD 1306	8 945 705 590
Q 4205	2 SD 1306	8 945 705 590
Q 4502	2 SD 1306	8 945 705 590
Q 4503	2 SD 1306	8 945 705 590
Q 4504	2 SD 601	8 925 820 030
Q 5001	2 SC 2295 * MSC 2295	8 945 705 490
Q 5002	2 SD 601	8 925 820 030
Q 5003	2 SD 601	8 925 820 030
Q 5004	2 SC 2295 * MSC 2295	8 945 705 490
Q 5005	2 SC 2295 * MSC 2295	8 945 705 490
Q 5006	2 SB 709-Q	8 925 820 033
Q 5007	2 SC 2295 * MSC 2295	8 945 705 490
Q 5008	2 SC 2295 * MSC 2295	8 945 705 490
Q 5009	2 SC 2295 * MSC 2295	8 945 705 490
Q 5010	2 SC 2295 * MSC 2295	8 945 705 490
Q 5011	2 SC 2295 * MSC 2295	8 945 705 490
Q 5012	2 SC 2295 * MSC 2295	8 945 705 490
Q 5013	2 SC 2295 * MSC 2295	8 945 705 490
Q 5014	2 SB 709-Q	8 925 820 033
Q 5015	2 SC 2295 * MSC 2295	8 945 705 490
Q 5020	2 SC 2295 * MSC 2295	8 945 705 490
Q 6001	2 SB 1320	8 945 706 106
Q 6002	2 SB 790 R	8 945 706 153
Q 6003	2 SB 709-Q	8 925 820 033
Q 6004	2 SB 790 R	8 945 706 153
Q 6006	2 SD 893	8 945 705 491
Q 6007	2 SD 592	8 945 705 609
Q 6008	2 SD 3311	8 925 705 482
Q 6011	2 SD 1856	8 945 705 900
Q 6012	2 SD 1991 (R)	8 945 705 692
Q 6013	2 SD 601	8 925 820 030
Q 6014	2 SD 601	8 925 820 030
Q 6015	2 SD 601	8 925 820 030
Q 6017	2 SD 601	8 925 820 030
Q 7380	2 SD 601-S * MSD 601-S	8 925 705 436
Q 8301	2 SD 601	8 925 820 030
Q 8302	2 SC 2295 * MSC 2295	8 945 705 490



Position Position	Bezeichnung Désignation	Bestell-Nr. No. de cde.
QR 301	UN 2213	8 945 705 315
QR 302	UN 2213	8 945 705 315
QR 303	UN 2213	8 945 705 315
QR 304	UN 2213	8 945 705 315
QR 305	UN 2110	8 945 705 465
QR 310	UN 2213	8 945 705 315
QR 311	UN 2213	8 945 705 315
QR 701	MRN 1404	8 945 706 094
QR 702	MRN 1402	8 945 706 092
QR 703	MRN 1404	8 945 706 094

Ersatzteilliste

Liste de pièces de rechange

Position Position	Bezeichnung Désignation	Bestell-Nr. No. de cde.
QR 704	MRN 1404	8 945 706 094
QR 705	MRN 1402	8 945 706 092
QR 706	MRN 1404	8 945 706 094
QR 707	MRN 1402	8 945 706 092
QR 713	MRN 1404	8 945 706 094
QR 714	MRN 1404	8 945 706 094
QR 801	UN 2213	8 945 705 315
QR 802	UN 2213	8 945 705 315
QR 803	UN 2213	8 945 705 315
QR 804	UN 2213	8 945 705 315
QR 805	UN 2213	8 945 705 315
QR 806	UN 2113	8 945 705 312
QR 1001	UN 2211	8 945 705 474
QR 1002	UN 2213	8 945 705 315
QR 2001	UN 2211	8 945 705 474
QR 2201	UN 2117	8 945 705 736
QR 2202	UN 2117	8 945 705 736
QR 2206	UN 2213	8 945 705 315
QR 2206	UN 2213	8 945 705 315
QR 2207	UN 2213	8 945 705 315
QR 2208	UN 2213	8 945 705 315
QR 2209	UN 2213	8 945 705 315
QR 2210	UN 2212	8 945 705 311
QR 2213	UN 2112	8 945 705 310
QR 2214	UN 2213	8 945 705 315
QR 2215	UN 2113	8 945 705 312
QR 2301	UN 2213	8 945 705 315
QR 2302	UN 2113	8 945 705 312
QR 2303	UN 2213	8 945 705 315
QR 2304	UN 2213	8 945 705 315
QR 2305	UN 2213	8 945 705 315
QR 2306	UN 2213	8 945 705 315
QR 2307	UN 2113	8 945 705 312
QR 3001	UN 2213	8 945 705 315
QR 3002	UN 2213	8 945 705 315
QR 3003	UN 2111	8 945 705 316
QR 3004	UN 2111	8 945 705 316
QR 3005	UN 2213	8 945 705 315
QR 3006	UN 2212	8 945 705 311
QR 3007	UN 2214	8 945 705 492
QR 3008	UN 2111	8 945 705 316
QR 3009	UN 2213	8 945 705 315
QR 3010	UN 2113	8 945 705 312
QR 3012	DTC 363 EK	8 925 705 138
QR 3013	UN 211 D	8 945 706 022
QR 3014	UN 2211	8 945 705 474
QR 3016	UN 4212	8 945 705 617
QR 3301	UN 2213	8 945 705 315
QR 3302	UN 2213	8 945 705 315
QR 3303	UN 2213	8 945 705 315
QR 3901	UN 2212	8 945 705 311
QR 4001	UN 2213	8 945 705 315
QR 4101	UN 2213	8 945 705 315
QR 4102	UN 2113	8 945 705 312
QR 4103	UN 2112	8 945 705 310
QR 4104	UN 2112	8 945 705 310
QR 4105	UN 2213	8 945 705 315
QR 4107	UN 6213	8 925 705 460
QR 4108	UN 6111	8 925 705 481
QR 4109	UN 6111	8 925 705 481
QR 4501	UN 2213	8 945 705 315
QR 4502	UN 2213	8 945 705 315
QR 5001	DTC 363 EK	8 925 705 138
QR 5002	DTC 363 EK	8 925 705 138
QR 5003	DTC 363 EK	8 925 705 138

Position Position	Bezeichnung Désignation	Bestell-Nr. No. de cde.
QR 5004	DTC 363 EK	8 925 705 138
QR 6002	UN 2213	8 945 705 315
QR 6003	UN 2213	8 945 705 315
QR 6004	UN 2213	8 945 705 315
QR 6005	UN 2211	8 945 705 474
QR 6006	UN 2211	8 945 705 474
QR 6007	UN 2211	8 945 705 474
QR 6008	UN 2211	8 945 705 474
QR 6009	UN 2211	8 945 705 474
QR 6010	UN 2213	8 945 705 315
QR 6011	UN 2211	8 945 705 474
QR 6013	UN 2111	8 945 705 316
QR 6014	UN 2113	8 945 705 312
QR 6015	UN 2213	8 945 705 315
QR 6016	UN 2213	8 945 705 315
QR 6017	UN 2213	8 945 705 315
QR 6018	UN 2113	8 945 705 312
QR 6019	UN 2213	8 945 705 315
QR 6020	UN 2213	8 945 705 315
QR 6021	UN 2113	8 945 705 312
QR 6022	UN 2111	8 945 705 316
QR 6024	UN 2113	8 945 705 312
QR 6025	UN 2212	8 945 705 311
QR 6027	UN 2213	8 945 705 315
QR 6028	UN 2212	8 945 705 311
QR 6029	UN 2212	8 945 705 311
QR 6030	UN 2212	8 945 705 311
QR 6031	UN 2212	8 945 705 311
QR 7301	UN 2211	8 945 705 474
QR 7302	UN 2211	8 945 705 474
QR 7381	MRN 1404	8 945 706 094
QR 7382	MRN 1404	8 945 706 094
QR 7383	MRN 1404	8 945 706 094
QR 7384	MRN 1404	8 945 706 094
QR 7385	MRN 1404	8 945 706 094
QR 7386	MRN 1404	8 945 706 094
QR 7387	MRN 1404	8 945 706 094
QR 7388	MRN 1404	8 945 706 094
QR 7389	MRN 1404	8 945 706 094
QR 7901	MRN 2404	8 945 706 091
QR 7905	MRN 2404	8 945 706 091
QR 7906	MRN 1403	8 945 706 093
QR 7907	MRN 1404	8 945 706 094

R 1012	680	Ω	2 W	8 940 599 536
R 1013	820	Ω	2 W	8 940 599 537
R 6020	15	Ω	2 W	8 940 599 617
R 6023	22	Ω	2 W	8 940 599 263
R 6035	0,9	Ω		8 940 599 618
R 7334	22	Ω	2 W	8 901 027 005
R 7676	1,5	kΩ	1 W	8 940 599 365

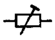
SW 3901	8 619 520 223

T 703	8 619 530 232
T 704	8 619 530 233
T 711	8 619 530 234
T 713	8 619 434 215

Ersatzteilliste

Position Position	Bezeichnung Désignation	Bestell-Nr. No. de cde.
T 851	7 µH	8 619 331 016
T 4001		8 619 434 201
T 7302		8 619 434 214
T 7303		8 619 438 209

Position Position	Bezeichnung Désignation	Bestell-Nr. No. de cde.
TH 3301		8 941 300 140



Position Position	Bezeichnung Désignation	Bestell-Nr. No. de cde.
VR 301	1 kΩ	8 941 599 678
VR 302	500 Ω	8 941 599 224
VR 303	500 Ω	8 941 599 241
VR 701	2 kΩ	8 941 599 511
VR 703	2 kΩ	8 941 599 511
VR 741	10 kΩ	8 941 599 531
VR 751	5 kΩ	8 941 599 784
VR 752	5 kΩ	8 941 599 504
VR 801	10 kΩ	8 941 599 442
VR 2001	50 kΩ	8 941 599 505
VR 2006	100 kΩ	8 941 599 506
VR 2009	200 kΩ	8 941 599 599
VR 2010	200 kΩ	8 941 599 599
VR 2011	100 kΩ	8 941 599 506
VR 2013	2 kΩ	8 941 599 511
VR 2018	100 kΩ	8 941 599 506
VR 2019	100 kΩ	8 941 599 506
VR 3001	2 kΩ	8 941 599 511
VR 3002	200 kΩ	8 941 599 679
VR 3301	1 kΩ	8 941 599 677
VR 3302	20 kΩ	8 941 599 631
VR 4001	10 kΩ	8 941 599 503
VR 4002	200 kΩ	8 941 599 508
VR 4004	5 kΩ	8 941 599 504
VR 4501	10 kΩ	8 941 599 694
VR 4502	20 kΩ	8 901 599 133
VR 4503	2 kΩ	8 941 599 511
VR 4505	10 kΩ	8 941 599 442
VR 4507	20 kΩ	8 901 599 133
VR 4509	5 kΩ	8 941 599 695
VR 4510	200 kΩ	8 941 599 633
VR 4512	200 Ω	8 941 599 509
VR 5001	10 kΩ	8 941 599 503
VR 5002	50 kΩ	8 941 599 696
VR 5003	20 kΩ	8 941 599 697
VR 5004	500 Ω	8 941 599 698
VR 5005	500 Ω	8 941 599 698
VR 7303	10 kΩ	8 941 599 503
VR 8301	500 Ω	8 941 599 851
VR 8302	1 kΩ	8 941 599 678

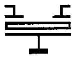
Position Position	Bezeichnung Désignation	Bestell-Nr. No. de cde.
X 701		8 946 193 448
X 702		8 946 193 416
X 709		8 946 193 417
X 717		8 946 193 155
X 730		8 946 193 418
X 731		8 946 193 449
X 801		8 946 193 375
X 2201		8 946 193 172
X 3301		8 946 193 281
X 3303		8 906 193 051

Liste de pièces de rechange

Position Position	Bezeichnung Désignation	Bestell-Nr. No. de cde.
X 6001		8 946 193 255
X 6002		8 946 193 178
X 7302		8 946 193 155

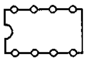
S-VHS Luminanz- und Farbteil-Platine
Platine luminance et chrominance S-VHS

Position Position	Bezeichnung Désignation	Bestell-Nr. No. de cde.
D 3701	MA 151 WK	8 945 405 317
D 3703	1 SS 99	8 905 406 067
D 3704	1 SS 99	8 905 406 067
D 3705	MA 4100 L	8 945 405 534

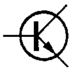


Position Position	Bezeichnung Désignation	Bestell-Nr. No. de cde.
DL 3701		8 619 580 303

Position Position	Bezeichnung Désignation	Bestell-Nr. No. de cde.
FL 3701		8 619 530 043
FL 3702		8 619 530 024
FL 3705		8 619 530 025
FL 3706		8 619 530 026
FL 3707		8 619 530 026
FL 3708		8 619 530 026
FL 3801		8 619 530 027
FL 3802		8 619 438 003
FL 3803		8 619 438 003
FL 3804		8 619 438 002
FL 3805		8 619 438 002



Position Position	Bezeichnung Désignation	Bestell-Nr. No. de cde.
IC 3701	M 52055 FP	8 945 902 337
IC 3702	M 52055 FP	8 945 902 337
IC 3703	AN 607 P	8 945 903 014
IC 3704	AN 3916	8 945 903 015
IC 3705	CX 22013	8 945 903 016
IC 3706	AN 608 P	8 945 903 017
IC 3707	AN 607 P	8 945 903 014
IC 3708	AN 608 P	8 945 903 017
IC 3801	CXL 1009 P	8 945 903 018
IC 3802	CXL 1009 P	8 945 903 018



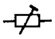
Position Position	Bezeichnung Désignation	Bestell-Nr. No. de cde.
Q 3701	2 SC 2295 * MSC 2295	8 945 705 490
Q 3702	2 SB 709-Q	8 925 820 033
Q 3703	2 SD 601	8 925 820 030
Q 3704	2 SC 2295 * MSC 2295	8 945 705 490
Q 3705	2 SB 709-Q	8 925 820 033
Q 3706	2 SC 2295 * MSC 2295	8 945 705 490
Q 3707	2 SC 2295 * MSC 2295	8 945 705 490
Q 3708	2 SB 709-Q	8 925 820 033

Ersatzteilliste

Position Position	Bezeichnung Désignation	Bestell-Nr. No. de cde.
Q 3709	2 SC 2295 * MSC 2295	8 945 705 490
Q 3710	2 SD 601	8 925 820 030
Q 3711	2 SC 2295 * MSC 2295	8 945 705 490
Q 3712	2 SB 709-Q	8 925 820 033
Q 3713	2 SC 2295 * MSC 2295	8 945 705 490
Q 3714	2 SC 2295 * MSC 2295	8 945 705 490
Q 3715	2 SB 709-Q	8 925 820 033
Q 3716	2 SC 2295 * MSC 2295	8 945 705 490
Q 3717	2 SA 1022	8 945 705 892
Q 3718	2 SC 2295 * MSC 2295	8 945 705 490
Q 3719	2 SD 601	8 925 820 030
Q 3720	2 SD 601	8 925 820 030
Q 3721	2 SD 601	8 925 820 030
Q 3722	2 SC 2295 * MSC 2295	8 945 705 490
Q 3723	2 SB 709-Q	8 925 820 033
Q 3724	2 SC 2295 * MSC 2295	8 945 705 490
Q 3725	2 SD 601	8 925 820 030
Q 3726	2 SD 601	8 925 820 030
Q 3728	2 SC 2295 * MSC 2295	8 945 705 490
Q 3729	2 SD 601	8 925 820 030
Q 3730	2 SD 601	8 925 820 030
Q 3731	2 SD 601	8 925 820 030
Q 3733	2 SD 601	8 925 820 030
Q 3734	2 SD 601	8 925 820 030
Q 3801	2 SC 2295 * MSC 2295	8 945 705 490
Q 3802	2 SB 709-Q	8 925 820 033
Q 3803	2 SB 709-Q	8 925 820 033
Q 3804	2 SB 709-Q	8 925 820 033

SW 3701		8 619 421 211

TH 3701		8 946 193 283
TH 3702		8 946 193 283



VR 3701	20	kΩ	8 941 599 699
VR 3702	2	kΩ	8 941 599 660
VR 3703	2	kΩ	8 941 599 660
VR 3704	2	kΩ	8 941 599 660
VR 3705	2	kΩ	8 941 599 660
VR 3706	1	kΩ	8 941 599 677
VR 3707	1	kΩ	8 941 599 677
VR 3708	1	kΩ	8 941 599 677
VR 3709	1	kΩ	8 941 599 677

X 3801		8 946 193 282

Luminanz- und Farbzusatz-Platine
Platine additionnelle luminance et chrominance

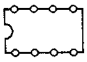
D 3501	MA 151 K	8 945 405 226

Liste de pièces de rechange

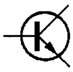
Position Position	Bezeichnung Désignation	Bestell-Nr. No. de cde.
D 3502	MA 153	8 945 405 227

DL 8501		8 619 580 304
DL 8502		8 619 580 305

FL 3501		8 619 438 003
FL 3502		8 619 438 003
FL 3503		8 619 438 002
FL 3504		8 619 438 002
FL 3505		8 619 530 028

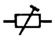


IC 3501	TL 8705 P	8 945 902 344
IC 3502	AN 78 L 09	8 945 902 359
IC 3503	UPC 1517 CA	8 945 900 112
IC 3504	CXL 1009 P	8 945 903 018
IC 3505	AN 78 L 09	8 945 902 359
IC 3506	M 52055 FP	8 945 902 337
IC 8501	AN 3594 K	8 945 900 452
IC 8503	BU 5715 F	8 945 903 019



Q 3501	2 SB 709-Q	8 925 820 033
Q 3502	2 SB 709-Q	8 925 820 033
Q 3503	2 SD 601	8 925 820 030
Q 3504	2 SB 709-Q	8 925 820 033
Q 3505	2 SC 2295 * MSC 2295	8 945 705 490
Q 3506	2 SC 2295 * MSC 2295	8 945 705 490
Q 3507	2 SB 709-Q	8 925 820 033
Q 3508	2 SC 2295 * MSC 2295	8 945 705 490
Q 3509	2 SC 2295 * MSC 2295	8 945 705 490
Q 3510	2 SB 709-Q	8 925 820 033
Q 8501	2 SC 2295 * MSC 2295	8 945 705 490
Q 8502	2 SD 601	8 925 820 030
Q 8503	2 SD 601	8 925 820 030

R 3523		8 946 193 284



VR 3501	1	kΩ	8 941 599 677
VR 3502	50	kΩ	8 941 599 688
VR 3503	50	kΩ	8 941 599 688
VR 8502	1	kΩ	8 941 599 677
VR 8503	1	kΩ	8 941 599 677

X 3501		8 946 193 221
X 3502		8 946 193 282

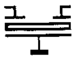
Ersatzteilliste

Position Position	Bezeichnung Désignation		Bestell-Nr. No. de cde.

Pal/Secam-Transcoder-Platine
Platine du transcodeur Pal/Secam

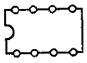
C 8081	30	pF	8 943 995 042
C 8097	30	pF	8 943 995 042

D 8002	MA 165 VT	8 945 406 279
D 8003	MA 4082 H	8 945 421 283
D 8004	1 SS 99	8 905 406 067
D 8005	MA 165 VT	8 945 406 279
D 8006	MA 165 VT	8 945 406 279
D 8007	MA 165 VT	8 945 406 279
D 8008	MA 165 VT	8 945 406 279
D 8010	MA 165 VT	8 945 406 279
D 8011	MA 165	8 905 421 098



DL 8001	8 619 580 302
DL 8002	8 619 580 302

FL 8002	8 619 530 044
FL 8003	8 619 530 045
FL 8004	8 619 530 046
FL 8005	8 619 530 047
FL 8006	8 619 530 043
FL 8007	8 619 530 024
FL 8008	8 619 530 048



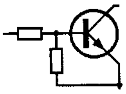
IC 8001	M 52055 P	8 945 902 213
IC 8002	TA 7348 P	8 945 901 295
IC 8003	TA 7348 P	8 945 901 295
IC 8004	VCR 0281	8 945 902 758
IC 8005	TA 7348 P	8 945 901 295
IC 8006	TA 7348 P	8 945 901 295
IC 8007	TA 7348 P	8 945 901 295
IC 8008	TA 7348 P	8 945 901 295
IC 8009	BU 5739 S	8 945 903 066
IC 8010	UPD 74 HC 123 A	8 945 903 073
IC 8011	AN 6914	8 905 956 758
IC 8012	TDA 2594	8 945 903 071
IC 8013	TDA 3592 A	8 945 903 100
IC 8014	TDA 2507	8 945 903 070
IC 8015	TDA 4510	8 945 903 072
IC 8016	TDA 2506	8 945 903 069
IC 8017	M 52055 P	8 945 902 213

Q 8001	2 SD 636	8 905 705 604
Q 8002	2 SC 2206 (B,C)	8 905 705 485

Liste de pièces de rechange

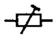
Position Position	Bezeichnung Désignation		Bestell-Nr. No. de cde.

Q 8003	2 SB 641	8 905 705 540
Q 8004	2 SC 2206 (B,C)	8 905 705 485
Q 8005	2 SB 641	8 905 705 540
Q 8006	2 SB 641	8 905 705 540
Q 8007	2 SB 641	8 905 705 540
Q 8008	2 SC 2206 (B,C)	8 905 705 485
Q 8010	2 SD 636	8 905 705 604
Q 8011	2 SD 636	8 905 705 604
Q 8012	2 SB 641	8 905 705 540
Q 8013	2 SC 2206 (B,C)	8 905 705 485
Q 8015	2 SD 636	8 905 705 604
Q 8016	2 SD 636	8 905 705 604
Q 8017	2 SB 641	8 905 705 540
Q 8018	2 SB 641	8 905 705 540
Q 8019	2 SC 2206 (B,C)	8 905 705 485
Q 8020	2 SC 2206 (B,C)	8 905 705 485
Q 8021	2 SD 636	8 905 705 604
Q 8022	2 SD 636	8 905 705 604
Q 8023	2 SD 636	8 905 705 604
Q 8024	2 SB 641	8 905 705 540
Q 8025	2 SD 636	8 905 705 604
Q 8026	2 SD 636	8 905 705 604
Q 8028	2 SD 636	8 905 705 604
Q 8029	2 SD 636	8 905 705 604
Q 8030	2 SD 636	8 905 705 604
Q 8031	2 SB 641	8 905 705 540
Q 8032	2 SC 2206 (B,C)	8 905 705 485
Q 8033	2 SD 636	8 905 705 604
Q 8034	2 SD 636	8 905 705 604
Q 8035	2 SB 641	8 905 705 540



QR 8001	UN 1213	8 945 705 386
QR 8002	UN 1213	8 945 705 386
QR 8004	UN 1213	8 945 705 386
QR 8005	UN 1213	8 945 705 386
QR 8006	UN 1213	8 945 705 386
QR 8007	UN 1213	8 945 705 386
QR 8008	UN 1213	8 945 705 386
QR 8009	UN 1211	8 945 705 586
QR 8010	UN 1211	8 945 705 586
QR 8011	UN 1211	8 945 705 586
QR 8013	UN 1113	8 945 705 588
QR 8014	UN 1211	8 945 705 586
QR 8015	UN 1213	8 945 705 386
QR 8016	UN 1113	8 945 705 588
QR 8017	UN 1113	8 945 705 588
QR 8018	UN 1213	8 945 705 386

R 8055	10	Ω	8 901 027 013
R 8056	12	Ω	8 940 599 137



VR 8001	20	kΩ	8 941 599 699
VR 8002	1	kΩ	8 941 599 677
VR 8003	50	kΩ	8 941 599 688
VR 8004	2	kΩ	8 941 599 660
VR 8005	500	Ω	8 941 599 676

Ersatzteilliste

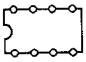
Position Position	Bezeichnung Désignation	Bestell-Nr. No. de cde.
VR 8006	50 kΩ	8 941 599 688
VR 8007	50 kΩ	8 941 599 688
VR 8008	2 kΩ	8 941 599 660

X 8001		8 946 193 172
X 8002		8 906 193 027

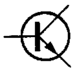
Secam-Farbteil-Platine
Platine chrominance Secam

D 1301	MA 165 VT	8 945 406 279

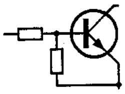
FL 8503		8 619 438 017
FL 8504		8 619 438 018
FL 8505		8 619 438 019
FL 8506		8 619 438 020
FL 8507		8 619 438 021
FL 8508		8 619 438 022
FL 8509		8 619 234 014
FL 8510		8 619 438 023



IC 8501	BA 7107 S	8 945 902 207
IC 8502	BA 7025 L	8 945 900 368



Q 1301	2 SD 1474-P (LB) NPN	8 945 705 358
Q 1302	2 SD 639	8 905 705 008
Q 1303	2 SD 636	8 905 705 604
Q 1304	2 SD 636	8 905 705 604
Q 8504	2 SB 641	8 905 705 540
Q 8505	2 SC 2206 (B,C)	8 905 705 485
Q 8506	2 SC 2206 (B,C)	8 905 705 485
Q 8508	2 SC 2206 (B,C)	8 905 705 485
Q 8509	2 SC 2206 (B,C)	8 905 705 485
Q 8510	2 SC 2206 (B,C)	8 905 705 485
Q 8511	2 SD 636	8 905 705 604
Q 8512	2 SD 636	8 905 705 604
Q 8513	2 SD 636	8 905 705 604
Q 8514	2 SB 641	8 905 705 540



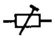
QR 8501	UN 1111	8 945 705 402
QR 8502	UN 1211	8 945 705 586

Liste de pièces de rechange

Position Position	Bezeichnung Désignation	Bestell-Nr. No. de cde.

R 8565	150 kΩ	8 941 300 111

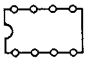
T 8501	7 µH	8 619 331 016



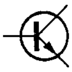
VR 8501	1 kΩ	8 941 599 744
VR 8502	1 kΩ	8 941 599 744

Kopfverstärker-Platine
Platine amplificateur de têtes

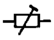
D 501	MA 165 VT	8 945 406 279
D 502	MA 165 VT	8 945 406 279



IC 501	AN 3334 K	8 945 902 455
IC 502	VCR 0271	8 945 902 453
IC 551	BA 7740 FS	8 945 902 439



Q 501	2 SB 709-Q	8 925 820 033



VR 501	2 kΩ	8 941 599 443
VR 502	2 kΩ	8 941 599 443

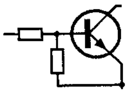
Reglerplatine
Platine de réglage

1	LED-Halter Support LED	8 619 411 113
2	Knopf Bouton	8 619 419 001
3	Blende Ecran	8 619 409 050
4	Knopf Bouton	8 619 414 008
5	Knopf Bouton	8 619 414 010

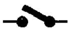
Ersatzteilliste

Liste de pièces de rechange

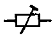
Position Position	Bezeichnung Désignation	Bestell-Nr. No. de cde.
D 6501	LN 28 RCPP	8 905 405 193
D 6502	MA 165	8 905 421 098
D 6503	MA 165	8 905 421 098
D 6504	MA 165	8 905 421 098
D 6505	MA 165	8 905 421 098
D 6506	MA 165	8 905 421 098
D 6507	MA 165	8 905 421 098



Position Position	Bezeichnung Désignation	Bestell-Nr. No. de cde.
QR 6501	DTC 114 EA	8 945 705 344



Position Position	Bezeichnung Désignation	Bestell-Nr. No. de cde.
SW 6501		8 619 322 210
SW 6503		8 619 322 210
SW 6504		8 619 424 218
SW 6506		8 619 421 211
SW 6507		8 619 421 211
SW 6509		8 619 428 211
SW 6511		8 619 424 218
SW 6512		8 619 421 211
SW 6513		8 619 421 211
SW 6514		8 619 424 218
SW 6518		8 619 520 217
SW 6519		8 619 520 217



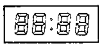
Position Position	Bezeichnung Désignation	Bestell-Nr. No. de cde.
VR 3004	20 kΩ	8 941 599 700
VR 6501	2 kΩ	8 941 599 701
VR 6503	20 kΩ	8 941 599 636

Timer-Platine
Platine principale du timer

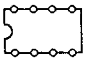
Position Position	Bezeichnung Désignation	Bestell-Nr. No. de cde.
1	Anzeigenhalter Support de l'afficheur	8 619 419 190
2	LED-Abstandshalter Support LED	8 619 418 105
3	IR-Empfänger Recepteur IR	8 619 520 596

Position Position	Bezeichnung Désignation	Bestell-Nr. No. de cde.
C 7501	30 pF	8 943 995 042

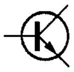
Position Position	Bezeichnung Désignation	Bestell-Nr. No. de cde.
D 7501	MA 3068	8 945 406 008
D 7502	MA 73	8 945 405 585
D 7507	MA 73	8 945 405 585
D 7509	MA 73	8 945 405 585
D 7511	MA 73	8 945 405 585
D 7513	MA 73	8 945 405 585
D 7514	MA 73	8 945 405 585
D 7516	MA 73	8 945 405 585
D 7517	MA 73	8 945 405 585
D 7530	MA 73	8 945 405 585
D 7532	MA 73	8 945 405 585
D 7533	MA 73	8 945 405 585
D 7534	MA 73	8 945 405 585
D 7535	MA 73	8 945 405 585
D 7536	MA 73	8 945 405 585
D 7537	MA 73	8 945 405 585
D 7538	MA 73	8 945 405 585
D 7539	MA 73	8 945 405 585
D 7540	MA 73	8 945 405 585
D 7541	MA 73	8 945 405 585
D 7542	MA 73	8 945 405 585
D 7550	LN 38 GCPP	8 945 405 162
D 7551	LN 48 YCPP	8 905 405 189
D 7552	LN 28 RCPP	8 905 405 193
D 7553	LN 28 RCPP	8 905 405 193
D 7554	LN 38 GCPP	8 945 405 162
D 7555	LN 28 RCPP	8 905 405 193
D 7556	LN 38 GCPP	8 945 405 162
D 7557	LN 28 RCPP	8 905 405 193
D 7559	LN 28 RCPP	8 905 405 193
D 7560	MA 73	8 945 405 585
D 7563	LN 38 GCPP	8 945 405 162



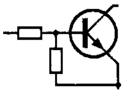
Position Position	Bezeichnung Désignation	Bestell-Nr. No. de cde.
DP 7501	DISPLAY	8 619 580 507



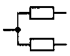
Position Position	Bezeichnung Désignation	Bestell-Nr. No. de cde.
IC 7501	MN 187125 VFI	8 945 903 067
IC 7502	MN 12261	8 945 902 441
IC 7503	MN 1280 L	8 945 901 543
IC 7504	MN 1280 S	8 945 902 705
IC 7505	BA 6810 S	8 945 902 437



Position Position	Bezeichnung Désignation	Bestell-Nr. No. de cde.
Q 7501	2 SD 601	8 925 820 030



Position Position	Bezeichnung Désignation	Bestell-Nr. No. de cde.
QR 7501	UN 2213	8 945 705 315
QR 7502	UN 2112	8 945 705 310
QR 7503	UN 2113	8 945 705 312
QR 7505	UN 2111	8 945 705 316
QR 7510	UN 2112	8 945 705 310
QR 7511	UN 2112	8 945 705 310

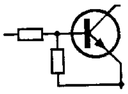


Position Position	Bezeichnung Désignation	Bestell-Nr. No. de cde.
RX 7501		8 940 890 190
RX 7502		8 940 890 206

Ersatzteilliste

Position Position	Bezeichnung Désignation	Bestell-Nr. No. de cde.
X 7501		8 946 193 175
X 7502		8 906 193 053

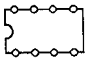
Jog/Shuttle-Platine Platine Jog/Shuttle

1	Codierschalter Combinateur de codage	8 619 520 231
2	Halter Support	8 619 510 355
D 6701	LN 38 GCPP	8 945 405 162
D 6702	LN 38 GCPP	8 945 405 162
D 6703	LN 38 GCPP	8 945 405 162
		
QR 6701	UN 1112	8 945 705 587
SW 6701		8 619 322 210

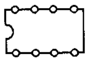
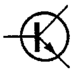
Netzteilplatine Platine alimentation secteur

C 1105	470	pF	400 V	8 942 247 213
C 1108	470	pF	400 V	8 942 247 213
C 1111	1000	pF		8 942 899 166
C 1112	120	µF	400 V	8 943 499 244
C 1113	1	µF	400 V	8 943 499 153
C 1115	330	pF	2 kV	8 942 233 214
D 1101	ENB 461 D-05			8 945 406 151
D 1102	EM 1 BLF			8 945 406 122
D 1103	EM 1 BLF			8 945 406 122
D 1104	EM 1 BLF			8 945 406 122
D 1105	EM 1 BLF			8 945 406 122
D 1106	VSD 0002			8 945 405 741
D 1107	AP 01 C			8 945 405 930
D 1108	MA 4030 L			8 945 406 011
D 1109	MA 178			8 945 405 619
D 1110	MA 165 VT			8 945 406 279
D 1111	ERA 22-02			8 945 405 617
D 1112	FMLG 12 SP			8 945 406 123
D 1113	10 ELS 2			8 945 406 124
D 1114	FMGB 14 L			8 945 406 125
D 1115	EK 14			8 945 406 126

Liste de pièces de rechange

Position Position	Bezeichnung Désignation			Bestell-Nr. No. de cde.
D 1116	MA 4130 L			8 945 406 127
D 1117	MA 4130 L			8 945 421 228
				
IC 1101	STRD 6009 E			8 945 903 021
IC 1102	STK 5392			8 945 902 708
IC 1103	SE 013 E			8 945 902 449
Q 1101	PC 111 AD			8 945 706 023
Q 1102	2 SD 1330 R			8 905 705 507
R 1106	68	kΩ	3 W	8 940 599 368
R 1111	82	Ω	2 W	8 940 599 621
R 1112	82	Ω	2 W	8 940 599 621
R 1113	56	Ω	2 W	8 940 599 622
R 1114	56	Ω	2 W	8 940 599 622
R 1115	1,8	kΩ	1 W	8 940 599 566
T 1101				8 619 530 205

Netzteilplatine (Ton) Platine alimentation secteur (audio)

D 1251	MA 4062		8 945 406 128
D 1252	EK 04		8 905 406 108
D 1256	MA 165		8 905 421 098
D 1257	MA 165		8 905 421 098
			
IC 1251	RC 4560 DD		8 945 902 211
			
Q 1251	2 SB 561		8 905 705 384
Q 1252	2 SD 655 F		8 905 706 023
Q 1253	2 SD 655 F		8 905 706 023
Q 1254	2 SD 655 F		8 905 706 023
R 1262	4,7	Ω	8 901 027 010

Ersatzteilliste

Position Position	Bezeichnung Désignation	Bestell-Nr. No. de cde.

Mikrofonverstärker-Platine
Platine d'amplificateur micro

Position	Bezeichnung	Bestell-Nr.
1	Mikrofonbuchse Prise micro	8 619 429 622
IC 6401	VCR 0172	8 945 901 138

Kopftrommel-Treiberplatine
Platine du cylindre de têtes

Position	Bezeichnung	Bestell-Nr.
IC 2901	AN 3815 K	8 945 902 433
TH 2901		8 940 599 702

Löschkopf-Platine
Platine de tête d'effacement

Position	Bezeichnung	Bestell-Nr.
CR 1401		8 940 890 203
Q 1401	2 SD 636	8 905 705 604
T 1401		8 619 434 200

FG.-Verstärkerplatine
Platine amplificateur FG

Position	Bezeichnung	Bestell-Nr.
IC 1501	UPC 358 G	8 945 901 485
L 1510		8 619 439 050
L 1511		8 619 439 050

Liste de pièces de rechange

Position Position	Bezeichnung Désignation	Bestell-Nr. No. de cde.

Laufwerk-Verbindungsplatine
Platine de liaison des mécanismes

Position	Bezeichnung	Bestell-Nr.
IC 1501	ON 2170	8 945 901 940
IC 1502	ON 2170	8 945 901 940

Abwickel-Tr.-Platine
Platine du transistor fin de bande

Position	Bezeichnung	Bestell-Nr.
1	Halter Support	8 619 316 198
Q 1501	PN 150 NV	8 905 406 077

Hinweis:
Handelsübliche Kondensatoren und Widerstände sind in der Ersatzteilliste nicht aufgeführt.Wir bitten Sie,diese Teile im Fachhandel zu beziehen.

Note:
Des condensateurs ainsi que des résistors traditionnels ne figurent pas dans la liste des pièces de rechange. Veuillez vous adresser au commerce spécialisé pour ces pièces.

ORDER NO. VRD9112M162

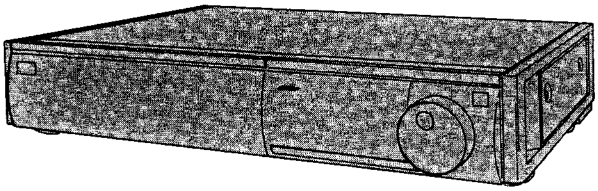
Service Manual

Video Cassette Recorder

Panasonic S-VHS
PAL SECAM
Hi-Fi HQ

NV-FS100HF

General Description
Adjustment Procedures
Block/Schematic Diagrams
Exploded Views/Parts List



SPECIFICATIONS

ITEM	SPECIFICATION
POWER	SOURCE: 220~240 V 50/60 Hz
	CONSUMPTION: 52 watts
RECORDING SYSTEM	2 rotary heads, helical scanning system
	PAL/SECAM
TV TUNER SYSTEM	VHF I: CHE2~CHS3 (PAL B) CH2~CH4 (SECAM L) VHF III: CHS4~CHS32 (PAL B) 121~174 MHz (INTER BAND) CH5~CH10 216~300 MHz (SECAM L) (INTER BAND) 300~393 MHz (HYPER BAND) VHF H: 108~121 MHz (SECAM L) (INTER BAND) UHF: CHS33~CH69 (PAL G) 393~470 MHz (HYPER BAND) (SECAM L) CH21~CH69
RF OUT SYSTEM	UHF: CH36±4 (PAL G, SECAM L) 73±3 dBμ, 75Ω terminated
VIDEO	HEADS: 4 rotary heads 1 pair for SP recording, playback and trick play (L-R heads) 1 pair for LP recording, playback and trick play (L'-R' heads), 1 flying erase head
	INPUT: EURO AV Connector (21 pin×2) 1.0 Vp-p, 75Ω terminated S-VIDEO IN Connector (4P) Y: 1.0 Vp-p, 75Ω unbalanced C: 0.3 Vp-p, 75Ω unbalanced

ITEM	SPECIFICATION
VIDEO	OUTPUT: EURO AV Connector (21 pin×2) 1.0 Vp-p, 75Ω terminated S-VIDEO OUT Connector (4 P) Y: 1.0 Vp-p, 75Ω unbalanced C: 0.3 Vp-p, 75Ω unbalanced
AUDIO	HEAD: 1 Stationary head (Normal Audio) 2 rotary heads (Hi-Fi 2CH)
	INPUT: AUDIO IN Connector (Phono type) More than −10 dBV (316 mV), more than 50 kΩ EURO AV Connector (21 pin×2) More than −10 dBV (316 mV), more than 10 kΩ MICROPHONE JACK −70 dBV
	OUTPUT: AUDIO OUT Connector (Phono type) −8 dBV (400 mV), Less than 1 kΩ EURO AV Connector (21 pin×2) −6 dBV (500 mV), Less than 1 kΩ HEAD PHONE Jack −30 dBV, 8Ω
	TRACK: 1 track (Normal-mono only) 2 channels (Hi-Fi Sound-Stereo)
TAPE FORMAT	S-VHS, VHS Cassette tape (Tape width 12.7 mm)
TAPE SPEED	SP: 23.39 mm/s LP: 11.7 mm/s Record/Playback Time: SP: 4 hours with 240 min. type tape LP: 8 hours with 240 min. type tape FF/REW Time 2.5 min. with 180 min. type tape
DIMENSIONS	460 (W)×109 (H)×404 (D) mm
WEIGHT	8.9 kg
STANDARD ACCESSORIES	1 pc. DIN-RF Cable 1 pc. Infra-red Remote Controller 2 pc. Audio Cables 1 pc. Digital Scanner 1 pc. Programme Sheet 1 pc. AC Mains Lead 1 pc. 4 P Cable 1 pc. RF Adapter (ANT. SIDE) 1 pc. RF Adapter (TV. SIDE)

Weight and dimensions shown are approximate.
Specifications are subject to change without notice.

Panasonic

INTRODUCTION

This service manual contains technical information which will allow service personnels to understand and service this model.
Section 1 presents you with some general information of features and controls, enabling you to become familiar with each function.
Section 2 contributes to your mechanical and electrical adjustment as well disassembly and replacement procedures.
In the case of very common information relating to other models like mechanical adjustments, please refer to each service manual.
Section 3 contains block diagrams which offers you information for checking and understanding each circuit. Schematic diagrams which give you detailed information such as waveforms, voltage data, function e.t.c...
Section 4 contains exploded views and parts list.
Please place orders using the parts list and not the drawing reference numbers.
If the circuit is changed or modified, this information will be followed by supplementary service manual to be filed with original service manual.

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SECTION 4

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SERVICE INFORMATION

1-1. HOW TO CHECK THE CRACKED CHIP PART

(1) Apply heat to the soldered portions of chip part using a soldering iron for about 2–3 seconds.
(2) If the chip part is faulty,it will be broken or cracked.

Caution: Do not leave soldering iron on the PCB too long as damage may occur to the PCB or the chip parts.

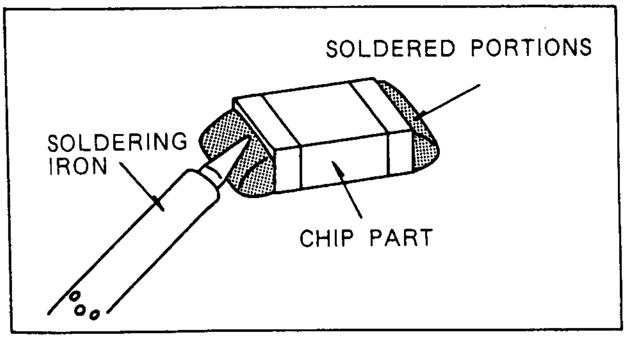

SOLDERED PORTIONS
SOLDERING IRON
CHIP PART

FIG. G1

Note: Regarding intermittent faults
The main causes of these faults are poor soldering and cracked chip parts.

1-2. HOW TO REPLACE THE CHIP PART

1) REMOVAL (RESISTOR, CAPACITOR, etc...)

(1) Presolder the one side of soldering portion for chip part and grasp the chip part by tweezers.

(2) Melt the presoldered portion. And then remove the chip part with a twisting motion while melting the soldering portion of another side quickly.

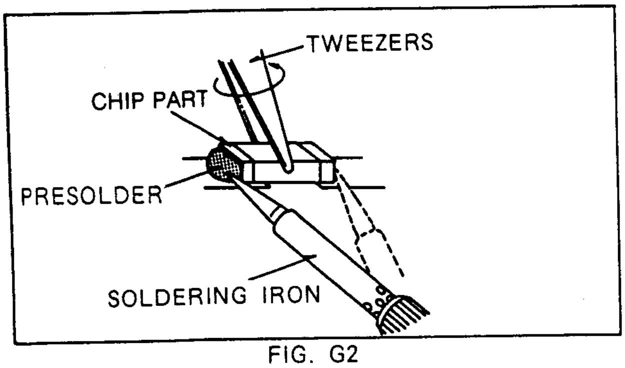

TWEEZERS
CHIP PART
PRESOLDER
SOLDERING IRON

FIG. G2

2) REMOVAL (transistor, diode, etc...)

(1) Grasp the chip part with tweezers and melt the solder of one lead.

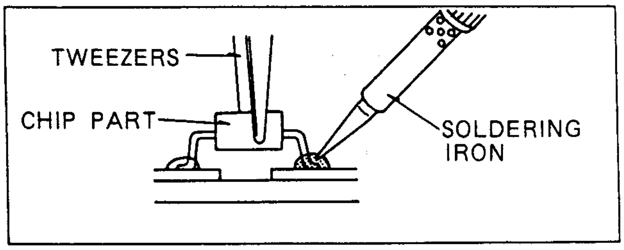

TWEEZERS
CHIP PART
SOLDERING IRON

FIG. G3

(2) Lift the side of that lead upward.

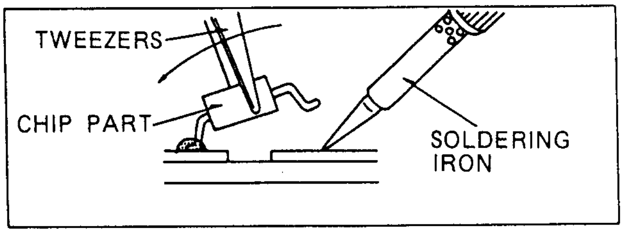

TWEEZERS
CHIP PART
SOLDERING IRON

FIG. G4

Caution: Do not lift the chip part too high as damage may occur to the PCB or the leads that are still soldered on the PCB.

(3) Simultaneously heat the solder of the two remaining leads and lift part to remove.

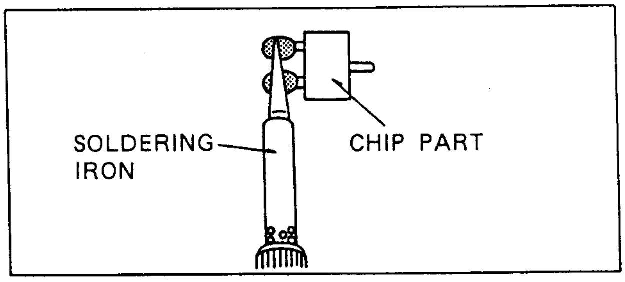

SOLDERING IRON
CHIP PART

FIG. G5

3) INSTALLATION

(1) Presolder the one side of contact point on the circuit board.

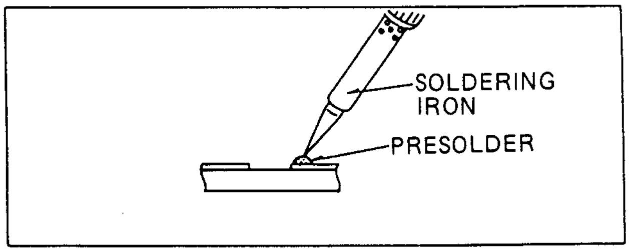

SOLDERING IRON
PRESOLDER

FIG. G6

(2) To install the chip part,hold in position using tweezers, apply heat to the pre-soldered portions using a fine tip soldering iron.
(3) Solder the other side of the chip part.
(4) Check your soldering.

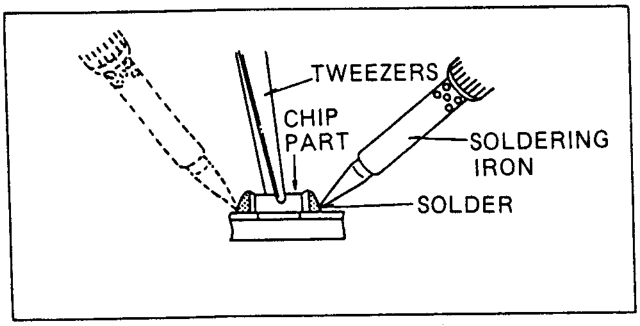

TWEEZERS
CHIP PART
SOLDERING IRON
SOLDER

FIG. G7

1-3. HOW TO REMOVE THE FLAT-IC

(WITH HOT-AIR FLAT-IC DESOLDERING MACHINE)

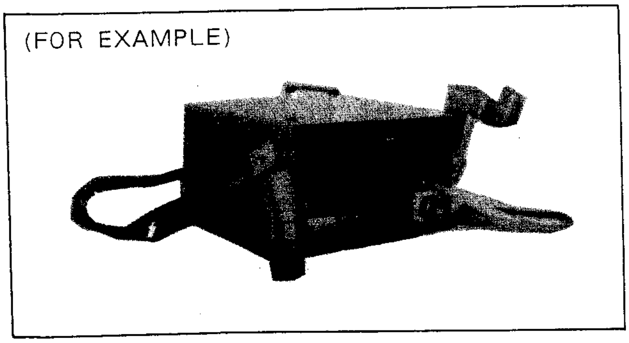

(FOR EXAMPLE)

FIG. G8

(1) Prepare the HOT-AIR FLAT-IC DESOLDERING MACHINE. And then apply hot air to FLAT-IC about 5 ~ 8 seconds.

(2) Remove the FLAT-IC with tweezers while applying the hot air.

Caution: Do not supply the hot air to the chip parts around the Flat-IC for long time as as damage may occur to the chip parts around the Flat -IC.

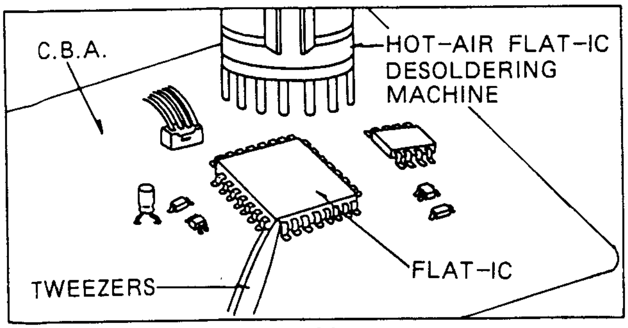

C.B.A.
HOT-AIR FLAT-IC DESOLDERING MACHINE
FLAT-IC
TWEEZERS

FIG. G9

(WITH SOLDERING IRON)

(1) Using solder braid remove the solder from all pins of the Flat-IC.
When you use the solder flux which is applied to all pins of the Flat-IC,you can remove it easily.

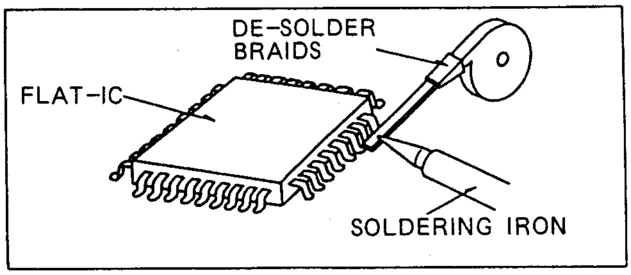

DE-SOLDER BRAIDS
FLAT-IC
SOLDERING IRON

FIG. G10

(2) Lift each lead of the Flat-IC upward one by one using a sharp pin or non solder wire(iron wire),while heating the pins using a fine tip soldering iron or a hot air blower.

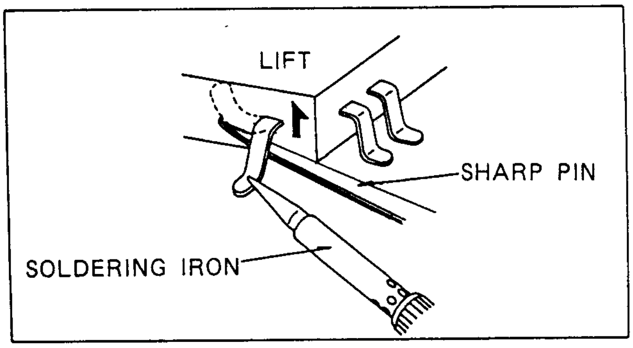

LIFT
SHARP PIN
SOLDERING IRON

FIG. G11

(WITH IRON WIRE)

(1) Affix the wire to workbench or solid mounting point as shown in FIG.G12.
(2) Pull up wire as the solder melts so as to lift the IC lead from the PCB contact pad,while heating the pins using a fine tip soldering iron or hot air blower.

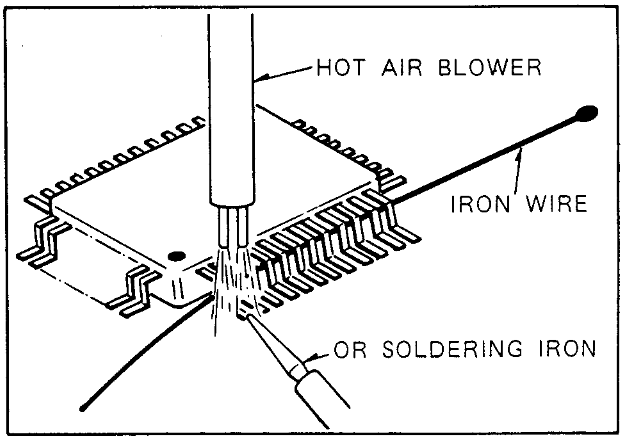

HOT AIR BLOWER
IRON WIRE
OR SOLDERING IRON

FIG.G12

Note: When using a soldering iron care must be taken to ensure that the Flat IC is not being held by glue before it is the PCB may be damaged if force is used.

1-4. SERVICING THE LUMINANCE & CHROMINANCE PACK C.B.A., HQ PACK C.B.A. & SERVO PACK C.B.A.

When servicing the luminance/chrominance pak C.B.A.,HQ pack C.B.A. and Servo pack C.B.A.,connections of extension cables are necessary as shown below.

PART NO	PART NAME	PCS	CONNECTION
VFK0582	8P EXTENSION CABLE	1	PK3021 – PK3021
VFK0583	9P EXTENSION CABLE	1	PK2204 – PK2204
VFK0584	11P EXTENSION CABLE	2	PK2203 – PK2203, PK3013 – PK3013
VFK0585	12P EXTENSION CABLE	2	PK3011 – PK3011, PK3012 – PK3012
VFK0586	15P EXTENSION CABLE	3	PK2201 – PK2201, PK2202 – PK2202, PK3022 – PK3022

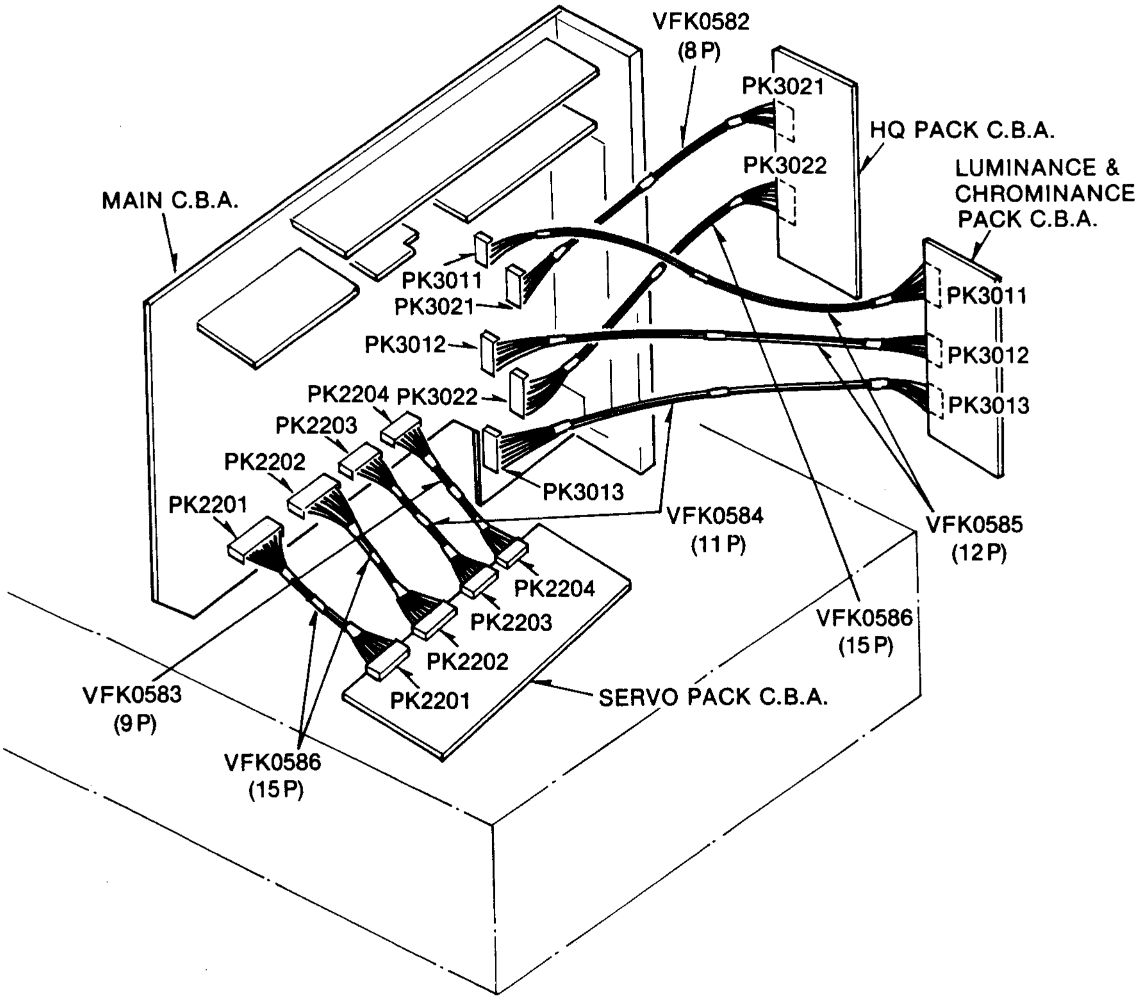
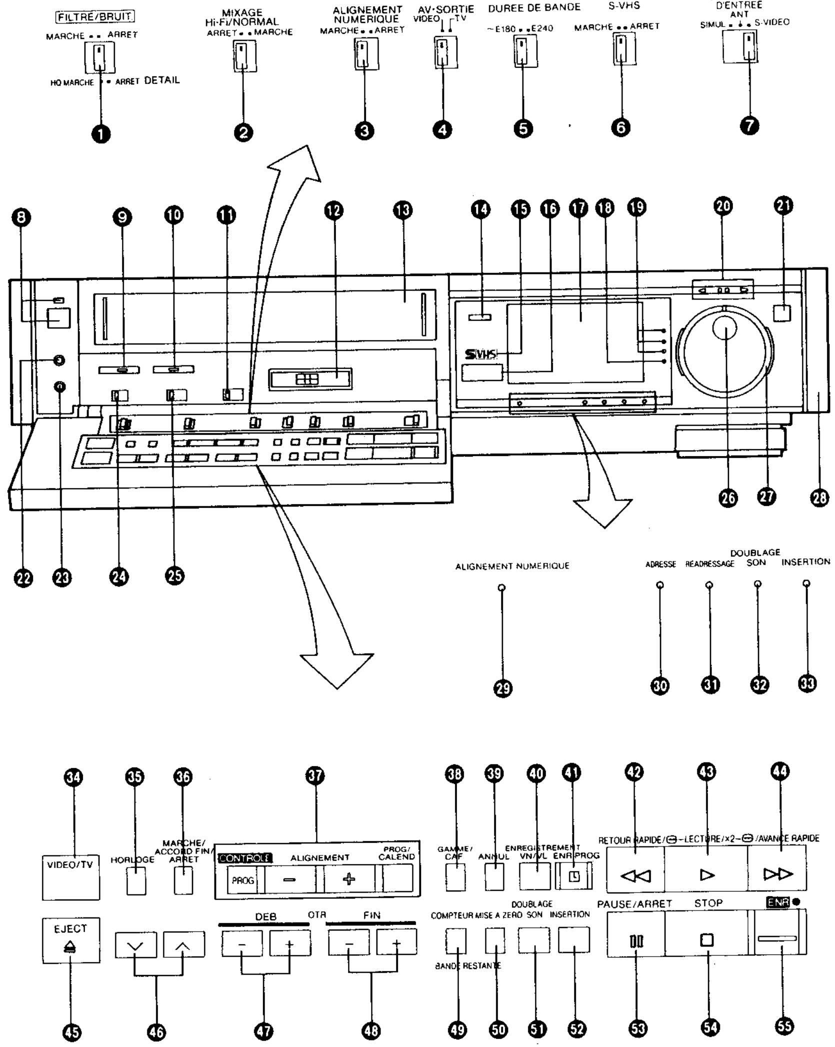

VFK0582
(8P)
PK3021
HQ PACK C.B.A.
PK3022
LUMINANCE &
CHROMINANCE
PACK C.B.A.
MAIN C.B.A.
PK3011
PK3021
PK3011
PK3012
PK3012
PK2204
PK3022
PK3013
PK2203
PK2202
PK3013
PK2201
VFK0584
(11P)
VFK0585
(12P)
PK2204
PK2203
VFK0586
(15P)
PK2202
VFK0583
(9P)
PK2201
SERVO PACK C.B.A.
VFK0586
(15P)

Fig.S1

SECTION 1
GENERAL DESCRIPTIONS
1-1. CONTROLS AND COMPONENTS

CONTROLS AND COMPONENTS

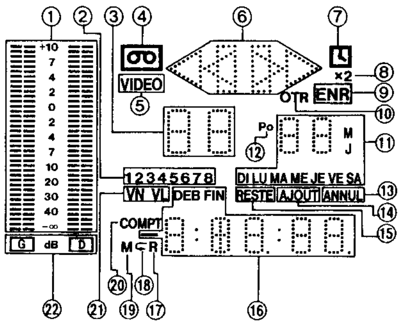
FRONT


FILTRE/BRUIT
MARCHE • • ARRET
HQ MARCHE • • ARRET DETAIL
MIXAGE
Hi-Fi/NORMAL
ARRET • • MARCHE
ALIGNEMENT NUMERIQUE
MARCHE • • ARRET
AV•SORTIE
VIDEO TV
DUREE DE BANDE
~E180 • •E240
S-VHS
MARCHE • • ARRET
SELECTEUR D'ENTREE
ANT
SIMUL • • • S-VIDEO
S-VHS
ALIGNEMENT NUMERIQUE
ADRESSE
READRESSAGE
DOUBLAGE SON
INSERTION
VIDEO/TV
EJECT
HORLOGE
MARCHE/ACCORD FIN/ARRET
CONTROLE
ALIGNEMENT
PROG/CALEND
PROG
DEB
OTR
FIN
GAMME/CAF
ANNUL
ENREGISTREMENT VN/VL
ENR PROG
RETOUR RAPIDE/⊖–LECTURE/×2–⊖/AVANCE RAPIDE
COMPTEUR/BANDE RESTANTE
MISE A ZERO
DOUBLAGE SON
INSERTION
PAUSE/ARRET
STOP
ENR ●
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬ ⑭ ⑮ ⑯ ⑰ ⑱ ⑲ ⑳ ㉑ ㉒ ㉓ ㉔ ㉕ ㉖ ㉗ ㉘ ㉙ ㉚ ㉛ ㉜ ㉝ ㉞ ㉟ ㊱ ㊲ ㊳ ㊴ ㊵ ㊶ ㊷ ㊸ ㊹ ㊺ ㊻ ㊼ ㊽ ㊾ ㊿ (51) (52) (53) (54) (55)

① Noise Filter/Detail Selector (FILTRE/BRUIT.)
② Hi-Fi/Normal Mix Switch
③ Digital Tracking Selector (ALIGNEMENT NUMERIQUE)
④ AV Selector (AV•SORTIE)
⑤ Tape Select Switch (DUREE DE BANDE)
⑥ S-VHS Selector
⑦ Input Signal Source Selector (SELECTEUR D'ENTREE)
⑧ VTR On/Off Switch with Indicator (VIDEO)
⑨ Headphones Output Level Control (NIVEAU DES CASQUES)
⑩ Picture Sharpness Control (NETTETE DE L'IMAGE)
⑪ Input Signal Selector (SIGNAL D'ENTREE)
⑫ Hi-Fi Rec Level Controls (NIVEAU D'ENREGISTREMENT Hi-Fi)
⑬ Cassette Compartment
⑭ Control Panel Open Button (APPUYER POUR OUVRIR)
⑮ S-VHS Indicator
⑯ Infra-red Remote Control Receiver
⑰ Multi-Function Display
⑱ Simulcast Indicator
⑲ System Indicator
⑳ Jog/Shuttle Indicator
㉑ Jog/Shuttle Button (IMAGE/IMAGE/RAPIDE)
㉒ Microphone Input Socket (MIC)
㉓ Headphones Socket (CASQUE)
㉔ Output Signal Selector (SIGNAL DE SORTIE)
㉕ Recording System Switch (NORME D'ENREGISTREMENT)
㉖ Jog Dial
㉗ Shuttle Ring
㉘ Side Panel (Removable)
㉙ Digital Tracking Indicator (ALIGNEMENT NUMERIQUE)
㉚ Address Indicator (ADRESSE)
㉛ Renumber Indicator (READRESSAGE)
㉜ Audio Dubbing Indicator (DOUBLAGE SON)
㉝ Insert Editing Indicator (INSERTION)
㉞ VIDEO/TV Selector
㉟ Clock Button (HORLOGE)
㊱ Preset/Fine/Normal Button (MARCHE/ACCORD FIN/ARRET)
㊲ Timer Controls
㊳ Band/AFC Button (GAMME/CAF)
㊴ Clear Button (ANNUL)
㊵ Tape Speed Button (ENREGISTREMENT)
㊶ Timer Record Button (ENR PROG)
㊷ Rewind ◀◀/Review ⊖ Button (RETOUR RAPIDE/⊖)
㊸ Play/×2 Button (▶) (LECTURE/×2)
㊹ Fast Forward ▶▶/Cue ⊖ Button (⊖/AVANCE RAPIDE)
㊺ Eject Button (⏏)
㊻ Channel Selection Up and Down Buttons
㊼ OTR On Buttons (DEB)
㊽ OTR Off Buttons (FIN)
㊾ Counter/Remaining Tape Time Selector (COMPTEUR/BANDE RESTANTE)
㊿ Reset Button (MISE A ZERO)
(51) Audio Dubbing Button (DOUBLAGE SON)
(52) Insert Editing Button (INSERTION)
(53) Pause/Still Button (❚❚) (PAUSE/ARRET)
(54) Stop Button (■)
(55) Record Button (ENR ●)

CONTROLS AND COMPONENTS (CONT'D)

Multi-Function Display



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ENR
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DI LU MA ME JE VE SA
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DEB FIN
RESTE
AJOUT
ANNUL
COMPT
M
R

① Audio Level Meter

② Timer Programme Number

③ Channel Display

④ Cassette-in Indicator

⑤ Video Indicator

⑥ Tape Running Display

⑦ Timer Recording Indicator

⑧ Double Speed Indicator

⑨ Recording Indicator

⑩ OTR Indicator

⑪ Date Display

⑫ Position Indicator

⑬ Erase Indicator

⑭ Write Indicator

⑮ Remaining Tape Time Indicator

⑯ Tape Counter Indicator

⑰ Search Indicator

⑱ Repeat Indicator

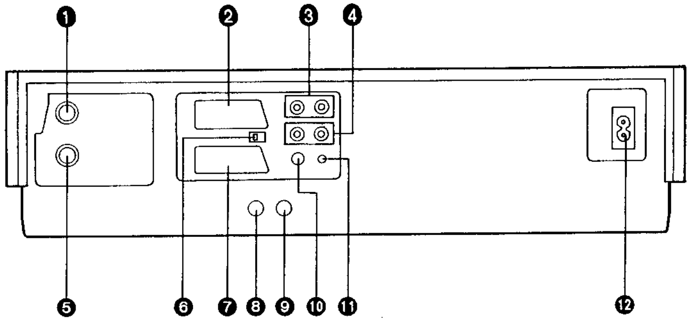
⑲ Memory Indicator

⑳ Counter Mode Indicator

㉑ Tape Speed Indicator

㉒ Audio Output Mode Indicators

REAR



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❾
❿
⓫
⓬

❶ RF Output Socket (SORTIE ANT)

❷ AV Socket (TV)

❸ Audio Input Sockets (ENT AUDIO)

❹ Audio Output Sockets (SORTIE AUDIO)

❺ RF Input Socket (ENT ANT)

❻ AV Format/Test Signal Switch
(FORMAT PERITEL/TEST SIGNAL)

❼ AV Socket (C • +)

❽ S-Video Input Socket (S-VIDEO ENT)

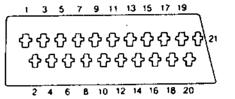
❾ S-Video Output Socket (S-VIDEO SORTIE)

❿ Editing Control Socket (MONTAGE)

⓫ Synchro Edit Socket
(SYNCHRO MONTAGE)

⓬ AC Mains Lead Socket (SECTEUR~)

❷ ❼ Connections of the AV Socket

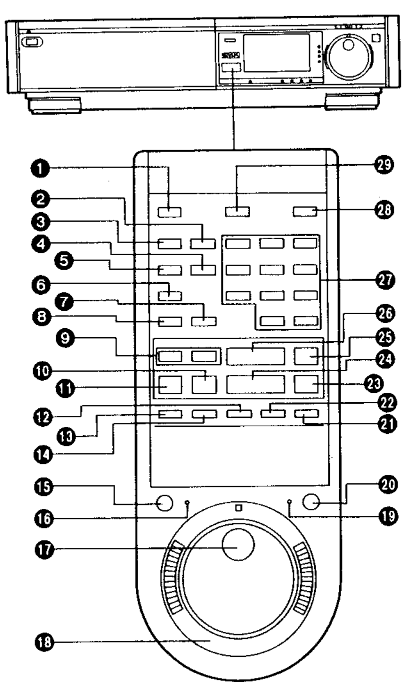


1 3 5 7 9 11 13 15 17 19
21
2 4 6 8 10 12 14 16 18 20

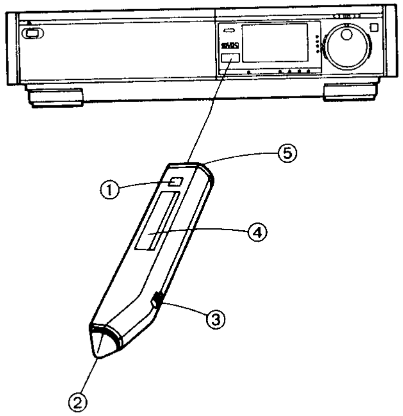
NOR	Y/C
1 AUDIO OUTPUT CH2 (R)	1 AUDIO OUTPUT CH2 (R)
2 AUDIO INPUT CH2 (R)	2 AUDIO INPUT CH2 (R)
3 AUDIO OUTPUT CH1 (L)	3 AUDIO OUTPUT CH1 (L)
4 AUDIO GND	4 AUDIO GND
5 GND	5 GND
6 AUDIO INPUT CH1 (L)	6 AUDIO INPUT CH1 (L)
7 No connection	7 No connection
8 SWITCHING VOLTAGE	8 SWITCHING VOLTAGE
9 GND	9 GND
10 No connection	10 No connection
11 No connection	11 No connection
12 No connection	12 No connection
13 GND	13 GND
14 GND	14 GND
15 No connection	15 C OUT
16 No connection	16 No connection
17 VIDEO GND	17 VIDEO GND
18 GND	18 GND
19 VIDEO OUTPUT	19 Y OUT
20 VIDEO INPUT	20 VIDEO INPUT
21 GND	21 GND

1-2. INFRA-RED REMOTE CONTROLLER AND DIGITAL SCANNER

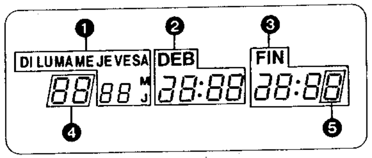
INFRA-RED REMOTE CONTROLLER AND DIGITAL SCANNER



- ❶ **VTR On/Off Button (VIDEO)**
- ❷ **Clock Counter Selector (HORLOGE/COMPTEUR)**
- ❸ **Audio Output Selector (SELECT. AUDIO)**
- ❹ **Remaining Tape Time Button (BANDE RESTANTE)**
- ❺ **Memory/Repeat/Search Button (MEMOIRE/REP./RECHER.)**
- ❻ **Reset Button (MISE A ZERO)**
- ❼ **Blank Search Button (BANDE NON ENREGISTREE)**
- ❽ **Time Search Button (RECHERCHE HORAIRE)**
- ❾ **Record Buttons (ENR ●)**
- ❿ **Rewind ◀◀/Review (⇤) Button (RETOUR RAPIDE/⇤)**
- ⓫ **Pause/Still Button (❚❚) [PAUSE/ARRET]**
- ⓬ **Write Button (AJOUT)**
- ⓭ **Index Button**
- ⓮ **Address Button (ADRESSE)**
- ⓯ **Jog/Shuttle On/Off Button (IMAGE/IMAGE/RAPIDE)**
- ⓰ **Jog/Shuttle Indicator**
- ⓱ **Jog Dial**
- ⓲ **Shuttle Ring**
- ⓳ **Channel Mode Indicator**
- ⓴ **Channel Mode On/Off Button (CANAL)**
- ㉑ **Renumber Button (READRESSAGE)**
- ㉒ **Erase Button (ANNULATION)**
- ㉓ **Fast Forward ▶▶/Cue (⇥) Button (⇥/AVANCE RAPIDE)**
- ㉔ **Play/×2 Button (▶) [LECTURE/×2]**
- ㉕ **Still Advance Button (❚▶) [AVANCE IMAGE]**
- ㉖ **Stop Button (■)**
- ㉗ **Programme Position (Channel) Selector Buttons**
- ㉘ **Monitor Button (CONTROLE)**
- ㉙ **VTR/TV Selector (VIDEO/TV)**



- ① **Transmit Button**
- ② **Bar Code Reading Section**
- ③ **Digital Scanner On/Off Switch (MARCHE/ARRET)**
- ④ **Bar Code Reader Display**



- ❶ Date Display
- ❷ Start Time Display
- ❸ End Time Display
- ❹ Channel Display
- ❺ Check Indicator

⑤ **Transmitting Section**

How to Operate the Digital Scanner

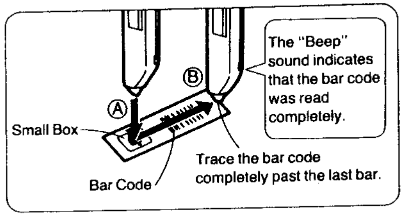
Set the Digital Scanner On/Off Switch (MARCHE/ARRET) to "MARCHE".

- If no operation is performed for more than 25 seconds (4 minutes during setting of the clock time), the scanner will automatically switch over to the power-saving standby condition and the lamp will go off. (In this case, if bar codes have already been read but not yet transmitted to the VTR, the data will be cancelled.)
- When the Digital Scanner On/Off Switch (MARCHE/ARRET) is set to "MARCHE" but the lamp is not lit, set the switch to "ARRET" and then to "MARCHE" again.

Tracing the Bar Codes

(A) Place the Digital Scanner vertically on the Small Box.

(B) Trace the bar code quickly in the direction of the arrow.


Small Box
Ⓐ
Ⓑ
Bar Code
The "Beep" sound indicates that the bar code was read completely.
Trace the bar code completely past the last bar.

- Treat the Programming Sheet with care. If the sheet gets dirty or scratched, the bar code reading may become impossible.
- Protect the Digital Scanner from strong shocks and vibration. Keep it away from water and places with high temperature and humidity.
- If the bar code is traced slowly, it cannot be read correctly.
- When there is no "Beep" sound, the reading of the bar code is incomplete. Trace the bar code again.
- When using the Programming Sheet, put it on flat surface: Reading the bar codes while holding it in your hand or bending it, may result in incorrect operation.
- Do not deviate from the bar code, nor stop tracing halfway.
- Do not slant the scanner to trace the bar code.

1-3. S-VHS FORMAT AND S-VIDEO SOCKET, INSTALLATION

INFRA-RED REMOTE CONTROLLER AND DIGITAL SCANNER (CONT'D)

Power Source for the Remote Controller (Digital Scanner)

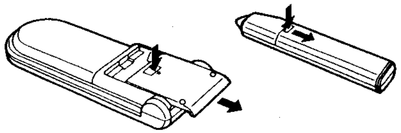
- The Remote Controller is powered by three IEC "R6" (Digital Scanner: 4IEC "R03") size batteries. The life of the batteries is about one year, however, it depends on the frequency of use. Inspect and if necessary, replace the batteries once a year.

CAUTION FOR BATTERY REPLACEMENT

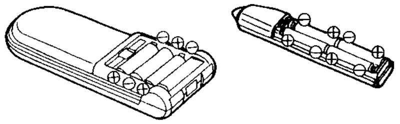
- Load the new batteries with their polarities (⊕ and ⊖) aligned correctly.
- Do not apply heat to batteries, or internal short-circuit may occur.
- If you do not intend to use the Remote Controller or Digital Scanner for a long period of time, remove the batteries and store them in a cool and dry place.
- Remove spent batteries immediately and dispose of them.
- Do not use an old and a new batteries together. (Also never use an alkaline battery with a manganese battery.)

Load the batteries as follows:

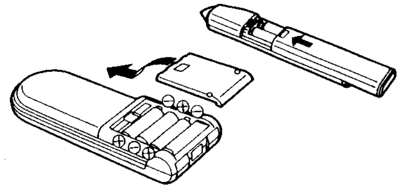
❶ Remove the battery compartment lid.



❷ Place the batteries in the battery compartment as indicated inside the battery compartment.



❸ Replace the lid.



Note:

- The infra-red beam should be transmitted directly at the Infra-red Remote Control Receiver on the front of the VTR.
- Direct sunlight may interfere with the beam.
- The lightsensing angle of the Infra-red Remote Control Receiver in the VTR is about 30°for each side from the centre.
- The unit should be used within a range of about 7 meters from the front of the VTR.

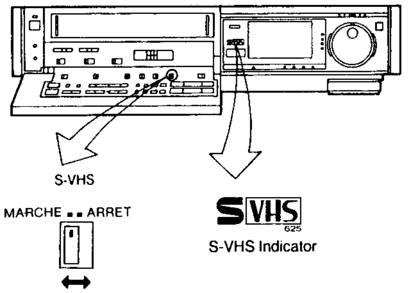
Recommendation

To save battery power, make sure to set the Digital Scanner On/Off (MARCHE/ARRET) Switch to "ARRET" after using the Digital Scanner. When the batteries are exhausted, the bar code reading can no longer performed.

S-VHS FORMAT

This VTR uses the S-VHS format that makes it possible to obtain high resolution and high picture quality by using the high-performance S-VHS video cassette tapes.

When making a recording on an S-VHS cassette tape, select the desired recording format with the S-VHS Selector.



S-VHS Selector

MARCHE: The recording will be made in the S-VHS format.
- The S-VHS Indicator lights up.

ARRET: The recording will be made in the VHS format.
- The S-VHS indicator does not light up.

(It is possible to make a recording on an S-VHS cassette tape in the VHS format, for example, in order to play back the tape on another VHS VTR.)

Using VHS Cassettes

The recording is made in the VHS format irrespective of the position to which the S-VHS Selector is set.

Playback of S-VHS and VHS Cassettes

It is not necessary to operate the S-VHS Selector.

- Cassette tapes recorded in the S-VHS format are automatically played back in the S-VHS format and tapes recorded in the VHS format are automatically played back in the VHS format.

  When an S-VHS tape which was recorded in the VHS format is played back, the S-VHS Indicator does not light up.

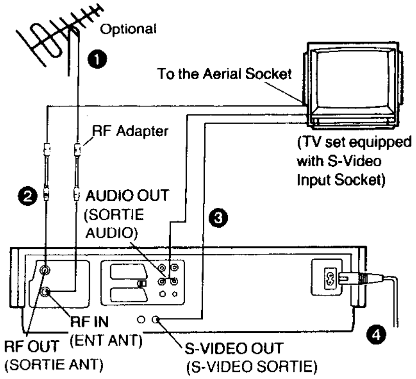
When a tape which was recorded in the S-VHS format is played back on a conventional VHS VTR, it is not possible to obtain playback picture.

S (SEPARATE)-VIDEO SOCKET, INSTALLATION

The conventional video sockets of VTRs output (input) a combination of the luminance signal (Y) and color signal (C) which are recorded on the video tape. The new S (Separate)-Video Socket allows separate transmission of these two signals to a TV set or separate input of these two signals in order to obtain clearer pictures.

The connection with the S-Video Cable can also be used for playback of a tape that was recorded in the conventional VHS system. The "S" in the "S-Video Socket" stands for "SEPARATED Y/C" not for "S-VHS".

Connection to a TV Set with S-Video Socket



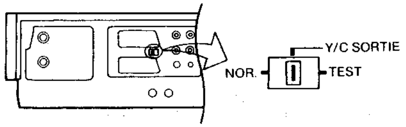
❶ Connect the external aerial via the RF Adapter to the RF Input Socket (ENT ANT) on the VTR.

❷ Connect the aerial terminal on your TV set via the other RF Adapter to the RF Output Socket (SORTIE ANT) on the VTR with the supplied DIN-DIN Coaxial Cable.

❸ Connect the S-Video Output Socket on the VTR with the S-Video Input Socket on the TV set, and the Audio Output Sockets on the VTR with the Audio Input Sockets on the TV set.

❹ Connect the AC Mains Lead to the AC Mains Socket of the VTR, and a mains outlet.

AV format/Test Signal Switch



NOR: Normally set to this position.

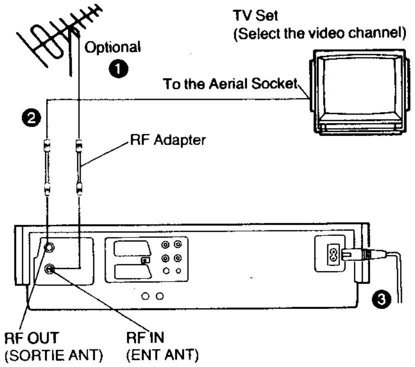
Y/C: Set to this position when connecting the VTR to a TV set equipped with 21-pin AV Connector with pins for separate Y/C signal input.

1-4. INSTALLATION AND TUNING THE TV SET TO THE VIDEO PLAYBACK CHANNEL

INSTALLATION

Consult your Panasonic dealer for advice about a suitable cable to use for connection to the AV Socket.

Connection to a TV Set without AV Socket

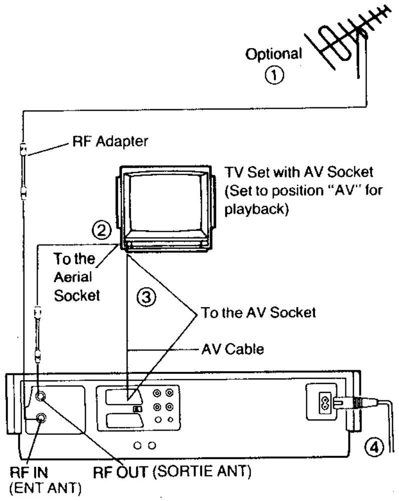

Optional
❶
TV Set
(Select the video channel)
To the Aerial Socket
❷
RF Adapter
❸
RF OUT
(SORTIE ANT)
RF IN
(ENT ANT)

❶ Connect the external aerial via the RF Adapter to the RF Input Socket (ENT ANT) on the VTR.

❷ Connect the aerial terminal on your TV set via the other RF Adapter to the RF Output Socket (SORTIE ANT) on the VTR with the supplied DIN-DIN Coaxial Cable.

❸ Connect the AC Mains Lead to the AC Mains Socket of the VTR to the mains outlet.

Connection to a TV Set with AV Socket


Optional
①
RF Adapter
TV Set with AV Socket
(Set to position "AV" for playback)
②
To the Aerial Socket
③
To the AV Socket
AV Cable
④
RF IN
(ENT ANT)
RF OUT (SORTIE ANT)

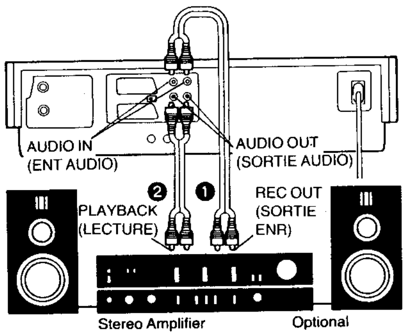
① Connect the external aerial via the RF Adapter to the RF Input Socket (ENT ANT) on the VTR.

② Connect the aerial terminal on your TV set via the other RF Adapter to the RF Output Socket (SORTIE ANT) on the VTR with the supplied DIN-DIN Coaxial Cable.

③ Connect the AV Socket on the VTR to the AV Socket on the TV set.
- The AV Socket allows recording and playback of picture and sound. This connection can be used with TV sets which are also equipped with an AV Socket.

④ Connect the AC Mains Lead to the AC Mains Socket of the VTR to the mains outlet.

Connection to a Stereo Amplifier


AUDIO IN
(ENT AUDIO)
AUDIO OUT
(SORTIE AUDIO)
❷
❶
PLAYBACK
(LECTURE)
REC OUT
(SORTIE ENR)
Stereo Amplifier
Optional

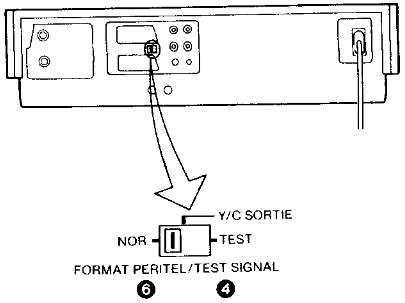
❶ Connect the Audio Input Sockets (ENT AUDIO) on the VTR to the REC OUT Sockets on the Stereo Amplifier.

❷ Connect the Audio Output Sockets (SORTIE AUDIO) on the VTR to the PLAYBACK Sockets (LECTURE) on the Stereo Amplifier.

- If an AV cable is used for the VTR-to-TV connection and both the VTR and the TV offer a setting for "AV", set only one of them to "AV". If both are set to "AV", picture and sound distortion may appear with some types of TV sets.
  On this VTR, the "AV" setting is programme position "0". Select it with the "0/AV" Button on the Remote Controller or the Channel Selection Up or Down Button on the VTR.
- Some TV sets can automatically switch to the "AV" input mode when VTR playback starts via the AV cable. But some TV sets have to be switched manually to the AV mode.
- For recording from a TV's tuner via the AV cable, set the VTR to the AV mode.

TUNING THE TV SET TO THE VIDEO PLAYBACK CHANNEL

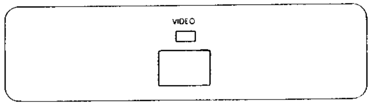
Disconnect the AV Cable when adjusting the TV set to the video playback channel by using the test pattern.


Y/C SORTIE
NOR.
TEST
FORMAT PERITEL/TEST SIGNAL
❻
❹

❶ Turn the TV set on and select the AV programme position or another programme position that is not occupied by any TV station.

❷ Press the VTR On/Off Switch to turn the VTR On.

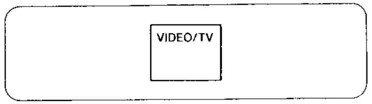
(FRONT SIDE)



- The corresponding indicator lights up.

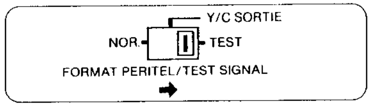
❸ Press the VIDEO/TV Selector to "VIDEO" position.

(FRONT SIDE)

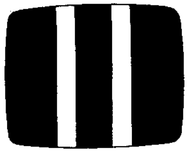


- VIDEO Indicator will appear in the Multi-Function Display.

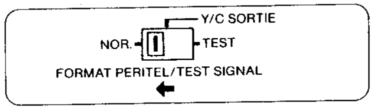
❹ Set the AV format/Test Signal Switch to "TEST".


Y/C SORTIE
NOR.
TEST
FORMAT PERITEL/TEST SIGNAL

❺ Tune the selected programme position of the TV set to UHF approx. channel 36.
Confirm on your TV set that the received test pattern is as shown.



❻ Set the AV format/Test Signal Switch to "NOR". Your TV is now ready to receive the RF output signal from the VTR.

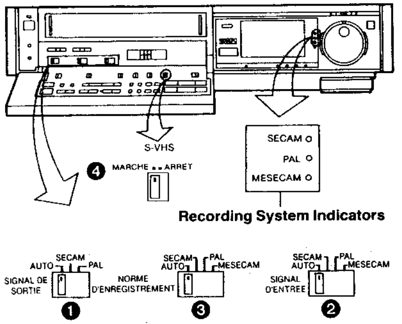

Y/C SORTIE
NOR.
TEST
FORMAT PERITEL/TEST SIGNAL

1-5. SYSTEM SELECTOR AND SETTING THE TUNER IN THE VTR

SYSTEM SELECTOR

Selection of the different Colour TV Systems:
PAL—SECAM—MESECAM

Three selectors on the front panel make it possible to select the colour TV system for signal input, for recording as well as for signal output. In addition, thanks to a built-in dual transcoder, the VTR NV-FS100HF can cover all possible cases of use.



① Output Signal Selector (SIGNAL DE SORTIE)

This selector can be used to select the TV system of the output signal for any kind of cassette that is being played back. When using a SECAM or SECAM/PAL TV set, setting this selector to the "AUTO" position will result in a VHS SECAM and an S-VHS signal with separated Y-C components being output, which covers all possible cases of use. The RF signal will also be SECAM L. When using a PAL TV set, set the Output Signal Selector to the "PAL" position.

Selector Setting	VHS Output (Scart composite)	S-VHS Output Y-C	RF Antenna Output
AUTO	SECAM	S-VHS-625	SECAM L
SECAM	SECAM	*C=SECAM	SECAM L
PAL	PAL	S-VHS-625	PAL G

② Input Signal Selector (SIGNAL D'ENTREE)

This selector has an AUTO setting which matches the input stages with the TV system being used. However, in case of unstable colours or to prevent an initial black-and-white picture when dubbing, it is possible to use the manual mode by setting this selector to the system of the input signal. If the setting is wrong in this case, the picture will be received in black and white.

③ Selection of the TV System for Recording

In the VHS mode, the Recording System selector can be used to select the TV system in which the recording will be made as well as the playback.
If the S-VHS mode is selected and an S-VHS cassette is used, this selector has no influence and the recording will be made in S-VHS.

AUTO:	The recording will be made in the TV system of the signal source, and the playback will automatically be in the TV system of the cassette being played back. In case of a recording in the slow tape speed, the PAL system will automatically be selected regardless of TV system of the signal source.
SECAM:	The recording will be made in the SECAM system regardless of the system of the input signal. The playback is reserved for SECAM cassettes.
PAL:	The recording will be made in the PAL system regardless of the system of the input signal. The playback is reserved for PAL cassettes.
MESECAM:	The recording will be made in the MESECAM system regardless of the system of the input signal. The playback is reserved for MESECAM cassettes.

■ **Recording System Indicators**

The lamp corresponding to the mode selected by Recording System Selector lights up.

When the switch is at the AUTO position:

- The Indicator of the colour system being recorded or played back lights up.

④ Recording in the S-VHS Mode

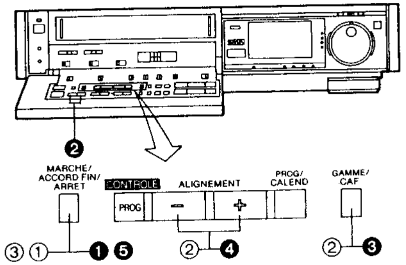
If the S-VHS mode is selected with the S-VHS selector and an S-VHS cassette is used, the setting of the Recording System Selector has no influence and the S-VHS mode will have priority.

> In the following cases, the playback picture could become distorted or black-and-white: In the special playback functions; tapes with reduced quality due to oft-repeated playback; TV programmes recorded with weak reception signal.

Note:
Even if the Recording System Selector is set to the "AUTO" position, the colours may be unstable depending on the condition of the signal that is to be recorded.
In this case, set the Recording System Selector to the "SECAM", "PAL" or "MESECAM" position, according to the system of the input signal.

SETTING THE TUNER IN THE VTR

The tuner in the VTR makes it possible to receive TV broadcasts and to record these programmes without having to turn on the TV set.



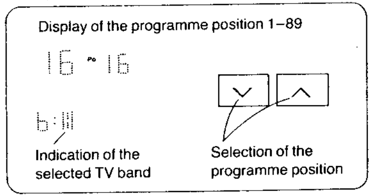
Preparation

- Turn the TV set on and select the programme position (channel) which you have tuned to the video playback channel.
- Press the VTR On/Off Switch to turn the VTR on.
- Set the Input Signal Souce Selector (SELECTEUR D'ENTREE) to "ANT".
- Press the VIDEO/TV Selector to "VIDEO" position.
- Set the Input Signal Selector (SIGNAL D'ENTREE) to the position that matches the colour system in which the TV station to be tuned is broadcasting.

❶ Press the Preset/Fine/Normal Button (MARCHE/ ACCORD FIN/ARRET).
The indication on the Multi-Function Display changes from the clock indication to the position indication.

❷ Press the Channel Up or Down Button to select a programme position (channel) which you want to tune to a TV station.

❸ Press the Band/AFC Button (GAMME/CAF) to select the "I", "III", "H" or "U" position.


Display of the programme position 1–89
16 16
b:III
Indication of the selected TV band
Selection of the programme position

BAND	I INFRADYNE	III SUPRADYNE	H SUPRADYNE	U SUPRADYNE
SECAM L	2–4	121–174 MHz (INTER BAND) 5–10 (VHF III) 216–300 MHz (INTER BAND) 300–393 MHz (HYPER BAND)	108–121 MHz (INTER BAND)	393–470 MHz (HYPER BAND) 21–69 (UHF BAND IV/V)
PAL B/G	E2–E4 S1–S3	S4–S10 E5–E12 S11–S32	——	S33–S41 21–69

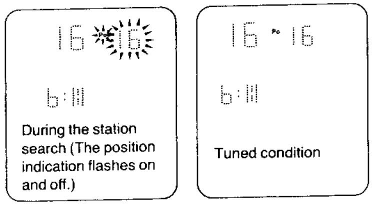
The tuner in the VTR can be preset with up to 89 stations.

Interband Broadcast Reception

This VTR can receive TV programmes broadcast in areas where cable television service is available.

When a Canal Plus Decoder is connected, it is possible to preset Canal Plus station on the programme positions 90–99.

❹ Press the "+" or "−" Button.



During the station search (The position indication flashes on and off.)

Tuned condition

- When the tuning of the station is completed, the indication stops flashing and the tuned station is automatically memorized.
- At every push of the "+" or "−" Button, the station will be tuned automatically.

Repeat steps ❷–❹ for each channel you want to tune to a station.

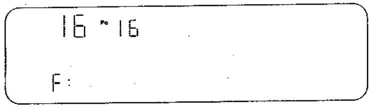
❺ Press the Preset/Fine/Normal Button (MARCHE/ ACCORD FIN/ARRET) twice.
The indication on the Multi-Function Display changes back to the previous indication.

Fine Tuning Procedure

If fine tuning is necessary, for example for a weak station which is close to a strong station:

① Press the Preset/Fine/Normal Button (MARCHE/ ACCORD FIN/ARRET) twice.

② Press the "+" or "−" Button to obtain the best tuning condition.



- "AFC" Indicator will not be displayed.
- To return the tuning to its former state, press the Band/AFC Button (GAMME/CAF).

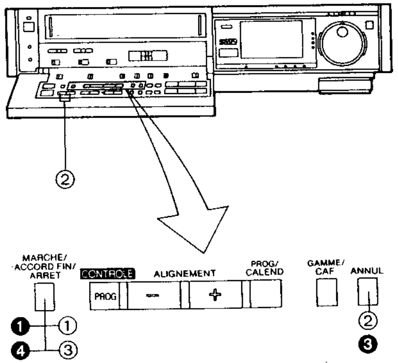
③ Press the Preset/Fine/Normal Button (MARCHE/ ACCORD FIN/ARRET).

Selecting Canal Plus Stations

❶ Connect the Canal Plus Decoder as shown on page 1–14.

❷ Select the desired Canal Plus station (programme positions 90–99). The operation is the same as described in steps ❶–❺ above.

1-6. SETTING THE CLOCK TO THE PRESENT TIME

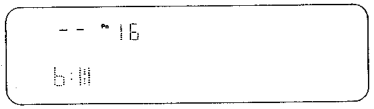


Blanking of Unoccupied Programme Positions

❶ Press the Preset/Fine/Normal Button (MARCHE/ ACCORD FIN/ARRET).

❷ Press the Channel Up or Down Button to select a programme position (channel) which you do not want to tune to a TV station.

❸ Press the Clear Button (ANNUL) ("– –" will be displayed in the programme Position Indication).



- Repeat steps ❷ and ❸ for any programme positions on which no stations are to be tuned. Afterwards, these programme positions will be skipped during Up/Down selection of the programme position.

❹ Press the Preset/Fine/Normal Button (MARCHE/ ACCORD FIN/ARRET) twice.

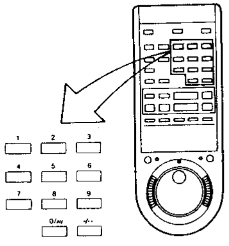
Cancelling the Clear Function (Blanking)

① Press the Preset/Fine/Normal Button (MARCHE/ ACCORD FIN/ARRET).

② To cancel the blanking of a programme position, select that programme position on the VTR and then press the Clear Button (ANNUL).

③ Press the Preset/Fine/Normal Button (MARCHE/ ACCORD FIN/ARRET) twice.

How to Select the Programme Position (Channel) on the Remote Controller

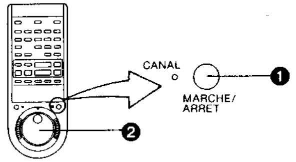


select channel	press button
1–9	1 — 9 respective channel
10	-/-- → 1 → 0
20	-/-- → 2 → 0
11–99 for example 32	-/-- → 3 → 2

If more than 5 seconds pass between the first, second and third push, the channel will not be changed normally.

Channel Selection with the Remote Controller

The same channel selection as with the Channel Up or Down Buttons on the VTR can also be performed with the Jog Dial on the Remote Controller.

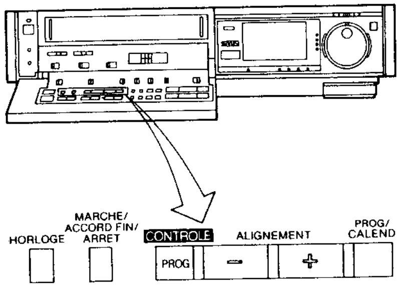


❶ Press the Channel Mode Button so that the adjoining Channel Indicator (CANAL) lights up.

❷ Turn the Jog Dial to select the desired TV station.
- After the desired TV station is selected, press the Channel Mode Button to turn off the Channel Indicator (CANAL).

SETTING THE CLOCK TO THE PRESENT TIME

The built-in digital clock employs the 24-hour system.

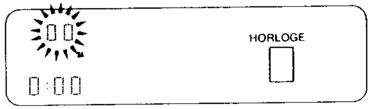


For Example: Set the clock for Sunday, October 10, 1999, 9:10

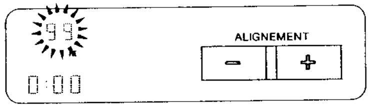
- Connect the VTR to the mains outlet.
- Press the VTR On/Off Switch (VIDEO) to turn the VTR On.

❶ When connecting this VTR to the mains or after a long power failure, the time indications flash.

❷ Press the Clock Button (HORLOGE) to start the date and time setting.

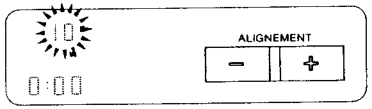


❸ Press the "+" or "–" Button to set the year.



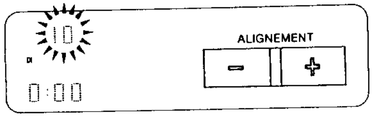
❹ Press the Next Button (PROG/CALEND).

❺ Press the "+" or "–" Button to set the month.



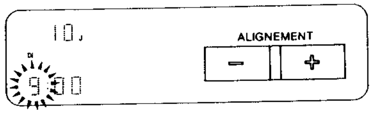
❻ Press the Next Button (PROG/CALEND).

❼ Press the "+" or "–" Button to set the date.



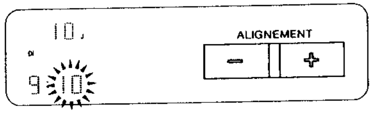
❽ Press the Next Button (PROG/CALEND).

❾ Press the "+"or "–" Button to set the hour.



❿ Press the Next Button (PROG/CALEND).

⓫ Press the "+" or "–" Button to set the minute.



⓬ Press the Clock Button (HORLOGE) when the present time becomes exactly 9:10'00".

10
9:10
HORLOGE

At every push of the Next Button (PROG/CALEND), the flashing indication changes in the following order.

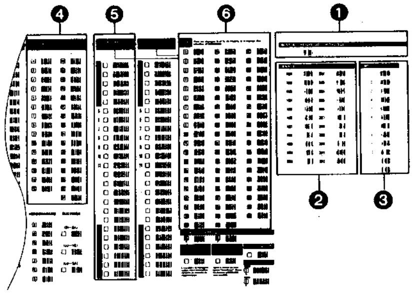
YEAR→ MONTH→ DATE→ HOUR→ MINUTE

- In case of a power failure, the timer back-up system maintains the clock operation and timer content for at least 60 minutes. However, depending on the charging time and the memory content, the back-up time may be considerably longer. However, it takes more than 60 minutes for the back-up circuit to become operational, after the VTR is connected to the mains.
- The Timer Record Function should be set to "Off", otherwise the VTR cannot be operated normally. In this case, the Timer Record Indicator "⊡" will flash to warn you.
- During date setting, the corresponding day is simultaneously set.
- The clock/timer of the VTR is programmed with the calendar up to the end of the year 2087.
  The indications 88-99 are for the years 1988-1999.
  The indications 00-87 are for the years 2000-2087.

1-7. THE VIDEO CASSETTE

SETTING THE CLOCK TO THE PRESENT TIME (CONT'D)

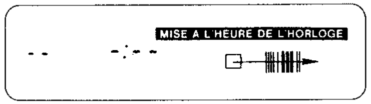
Setting the Clock to the Present Time Using the Bar Codes



Preparation

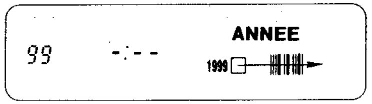
- Set the Digital Scanner On/Off Switch (MARCHE/ARRET) to "MARCHE".

❶ Trace the bar code "SETTING OF THE CLOCK (MISE À L'HEURE DE L'HORLOGE)".



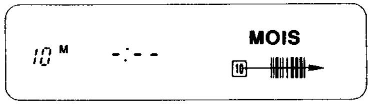
- -
-:- -
MISE A L'HEURE DE L'HORLOGE

❷ Trace the bar code for the year (ANNEE).

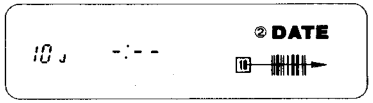


99
-:- -
ANNEE
1999

❸ Trace the bar code for the month (MOIS).

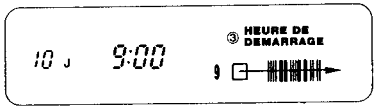


❹ Trace the bar code for the day of the month (DATE).



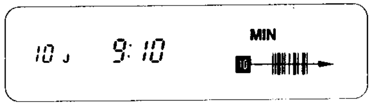
10 J
-:- -
② DATE
10

❺ Trace the bar code for the hour (HEURE OE DEMARRAGE).



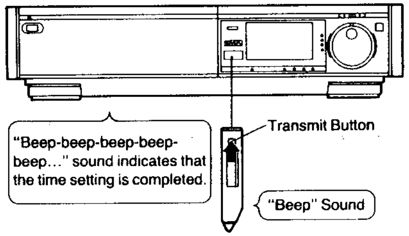
10 J
9:00
③ HEURE DE DEMARRAGE
9

❻ Trace the bar code for the minute (MIN).



10 J
9:10
MIN
10

❼ Press the Transmit Button on the Digital Scanner and then confirm that the time is displayed in the Multi-Function Display of the VTR.



"Beep-beep-beep-beep-beep..." sound indicates that the time setting is completed.
Transmit Button
"Beep" Sound

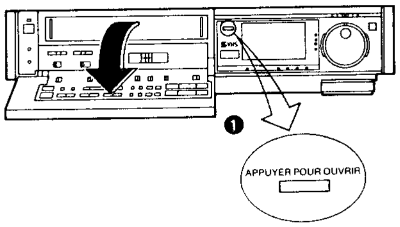
❽ Set the Digital Scanner On/Off Switch (MARCHE/ARRET) to "ARRET".

- If the transmission was not received correctly, the "Beep-Beep, Beep-Beep" sound from the VTR will warn you. In this case, perform transmission again.
- If the Digital Scanner is left with no operation performed for more than 4 minutes, it will automatically switch over to the power-saving standby condition and the lamp in the reading tip goes out. (In this case, bar codes that have already been read but not yet transmitted to the VTR) will be cancelled.
- The bar codes "SETTING OF THE CLOCK" (MISE À L'HEURE DE L'HORLOGE), "YEAR" (ANNEE) and "MONTH" (MOIS) are located on page 3 of the Programming Sheet.

THE VIDEO CASSETTE

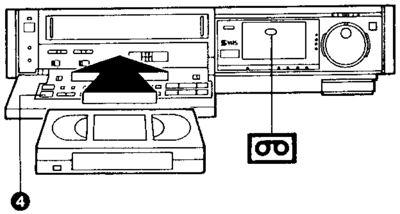
Inserting a Video Cassette (Auto Operation)

❶ Press the Control Panel Open Button (APPUYER POUR OUVRIR).



❶
APPUYER POUR OUVRIR

❷ Insert the video cassette as shown. The VTR will be turned on automatically and the cassette will be automatically drawn into the VTR.



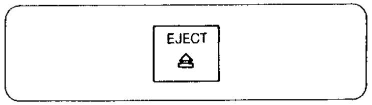
❸ When a video cassette is inserted, the "▣" mark will appear.

Notes:

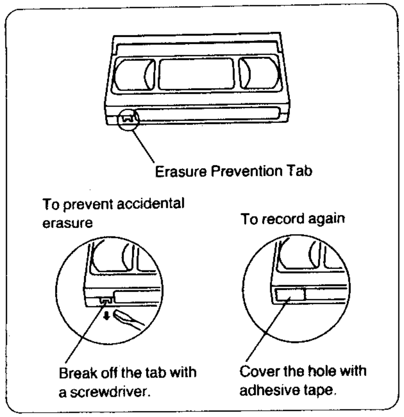
- When a video cassette with broken out erasure prevention tab (for example a pre-recorded tape) is inserted, playback will start immediately.
- Use VHS and S-VHS video cassette tapes only.

Removing a Video Cassette

❹ Press the Eject Button (≜).



Simply press the Eject Button; the VTR turns itself on, ejects the cassette and turns itself off again.



Erasure Prevention Tab
To prevent accidental erasure
To record again
Break off the tab with a screwdriver.
Cover the hole with adhesive tape.

Auto Operation

Auto VTR On
When a cassette is inserted, the VTR turns itself on automatically.

Auto Play
If the tab of the inserted cassette is broken out, playback will start automatically without having to press any button.

Auto Rewind
When the tape reaches its end during recording (except OTR and timer recording) or playback, it will automatically be rewound to the beginning.

Auto Eject
When trying to record on a cassette whose tab is broken out, the cassette will automatically be ejected to warn that the recording cannot be made.

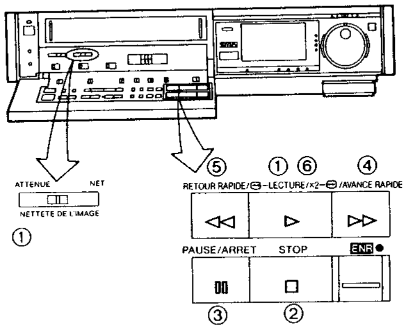
VTR-Off Eject
When the VTR is off, the inserted cassette can be ejected simply by pressing the Eject Button, and the VTR will automatically turn itself off again.

Rewind Auto Shut Off
When the VTR On/OFF Button is pressed during rewinding, the cassette will be ejected as soon as the beginning of the tape is reached, and the VTR will turn itself off.

Auto Timer Recording Standby
When the Timer Record Button is pressed during rewinding, the VTR will switch over to the timer recording standby mode after the beginning of the tape is reached.

1-8. PLAY BACK

PLAYBACK

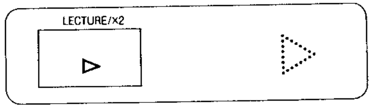


Preparation

- Make sure that the Timer Record Function is set to "Off".
- Insert a recorded video cassette.
  When a video cassette is already inside the VTR, press the VTR On/Off Switch (VIDEO) to turn it on.
- Turn the TV set on and select the video playback channel.
- Set the Noise Filter/Detail Selector (FILTRE/BRUIT.) to "On" (HQ MARCHE).
- Set the Digital Tracking Switch (ALIGNEMENT NUMERIQUE) to "On" (MARCHE).

❶ Normal Playback

Press the Play/×2 Button (▶) (LECTURE/×2).



- Control the picture as you like with the Picture Sharpness Control (NETTETE DE L'IMAGE) (sharp or soft contours).

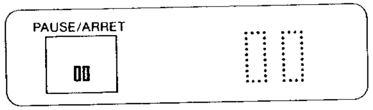
The format that was used for recording of the tape (VHS or S-VHS) is automatically detected and selected for playback.

❷ To Finish Playback

Press the Stop Button (■) to stop the playback.

❸ Super Still Playback

When the VTR is in the playback mode, press the Pause/Still Button (❚❚) (PAUSE/ARRET) to view a still-picture. To continue the normal playback, press this button again.



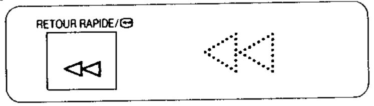
❹ Cue Playback

When the Fast Forward ▶▶/Cue ⊟ Button (⊟/AVANCE RAPIDE) is kept pressed while the VTR is in the playback mode, the tape will be played back at high speed in forward direction.

⊖/AVANCE RAPIDE

❺ Review Playback

When the Rewind ◀◀/Review ⊟ Button (RETOUR RAPIDE/⊟) is kept pressed while the VTR is in the playback mode, the tape will be played back at high speed in reverse direction.

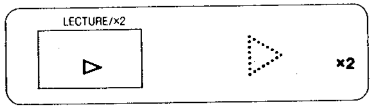


To make possible Cue or Review playback without having to keep the respective button pressed, first press the Memory/Repeat/Search Button (MEMOIRE/REP./RECHER) on the Remote Controller so that the Search Indicator "R" appears in the Multi-Function Display, and then press the Fast Forward ▶▶/Cue ⊟ Button (⊟/AVANCE RAPIDE) or the Rewind ◀◀/Review ⊟ Button (RETOUR RAPIDE/⊟).
To switch the VTR back to normal playback, press the Play/×2 Button (▶) (LECTURE/×2).

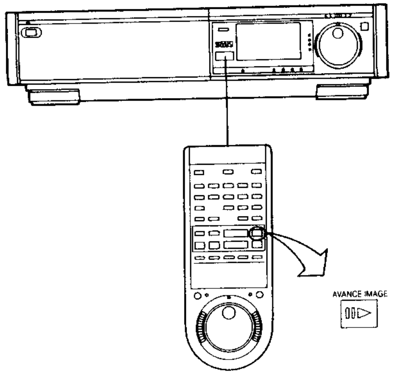
- When Cue or Review playback continues for more than 10 minutes, the VTR will automatically switch back to the normal playback mode.

❻ Double Speed Playback

When the VTR is in the playback mode, press the Play/×2 Button (▶) (LECTURE/×2) to view the action at twice the normal playback speed. To change back to normal playback, press the Play/×2 Button (▶) (LECTURE/×2) again.

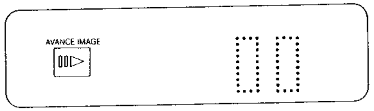


Using the Remote Controller



❼ Super Still Advance Playback

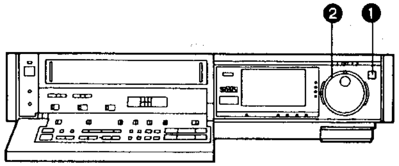
Press the Still Advance Button (❚▶) (AVANCE IMAGE) while the VTR is in the still playback mode. Each time you press this button, the still-picture will advance one single field.



- Depending on the type of TV set used, a black-and-white picture could be reproduced during playback of SECAM/MESECAM programmes recorded in the VL mode. However, this is normal and no indication of a malfunction.
- The sound will be played back only during normal playback.
- If you leave the VTR in the still and slow playback mode for more than 5 minutes, the VTR will automatically switch over to the Stop mode to protect the tape and the video heads.
- Noise which takes the form of horizontal bars appears on the TV in the Cue and Review playback modes. This is not an indication of a malfunction.
- The top of the picture may become distorted in the Cue, Review or Super Still (VL) mode. This is not an indication of a malfunction.
- When the picture rolls vertically in the Cue or Review mode, adjust the vertical hold control on the TV set.
- Immediately after starting Cue or Review playback, the picture may be distorted. Also, when these modes are cancelled, some momentary picture distortion may occur. However, this is not due to any malfunction.
- In "VL" mode only:
  1. During any playback mode other than normal playback, the picture may have some noise bars, the colour may be unstable, or a black and white picture may appear.
  2. When playing back a tape which was recorded on another VTR, it may be necessary to adjust the Tracking Control. In some cases the picture quality may still be inferior. This is due to limitation of format.

Using the Shuttle Ring

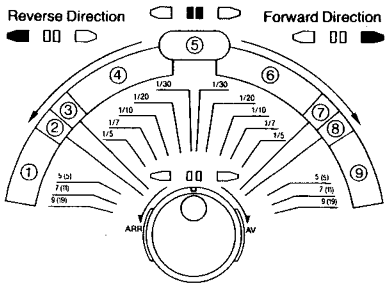
With the handy Shuttle Ring, the playback speed can be adjusted step by step in both forward and reverse directions.



❶ When the VTR is in the stop or playback mode, press the Jog/Shuttle Button (IMAGE/IMAGE/RAPIDE) (the playback will start at the speed that corresponds with the setting of the Shuttle Ring).

❷ Turn the Shuttle Ring to select the desired playback speed and direction.

Controlling the Shuttle Ring and Corresponding Directions and Playback Speeds.

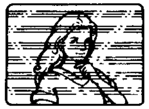


Playback Mode	Indication
① Review Playback	◁◁
② Double Speed Reverse Playback	◁ *2
③ Reverse Playback	◁
④ Reverse Slow Motion Playback	◁▯
⑤ Still Playback	▯▯
⑥ Slow Motion Playback	▯▷
⑦ Normal Playback	▷
⑧ Double Speed Playback	▷ *2
⑨ Cue Playback	▷▷

Note:
By tuning the shuttle ring, a desired Playback mode can be selected while observing the Playback mode indicator on the Multi-Function display.

- **The Figures on the Shuttle Ring Scale Indicate Multiples and Fractions of the Normal Playback Speed.**
  The Cue and Review playback speed will be different for recordings made in the VN and VL mode. The figures in parenthesis ( ) indicate the speed for recordings made in the VL mode.
- If Cue or Review playback continues for more than 10 minutes, the VTR will automatically switch over to the normal playback mode. If the Still and Slow playback continues for more than 5 minutes, the VTR will automatically switch over to the stop mode.
- To return to normal playback, press the Play/×2 Button (▶) (LECTURE/×2) or the Jog/Shuttle Button (IMAGE/IMAGE/RAPIDE).

The following may happen except during Slow and Normal playback in forward direction.



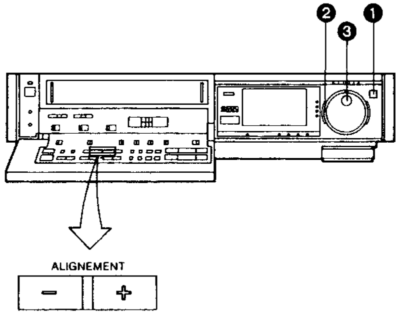
- Horizontal noise bars may appear in the picture, as shown above, or the top of the picture may become distorted.

- When the picture rolls vertically, adjust the vertical hold control on the TV set.

Still and Slow Playback
- Depending on the TV set used, it may not be possible to obtain a proper picture during Still and Slow playback.
- If the TV set is equipped with an automatic vertical hold control, the picture may shake vertically. In this case, set the TV set's vertical hold (AUTO/MANUEL) selector to the "MANUEL" position, and adjust its vertical hold control.
- When changing over from Review Search to Still playback, the picture will reverse by a few frams approx. 2 seconds later.

Using the Jog Dial

The convenient Jog Dial makes it easy to locate any desired frame with utmost precision.



❶ Press the Jog/Shuttle Button (IMAGE/IMAGE/RAPIDE) while the VTR is in the stop mode or in the playback mode.

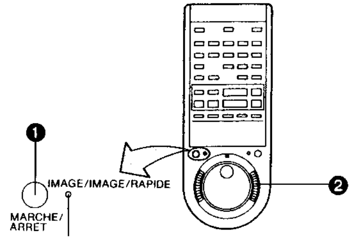
❷ Return the Shuttle Ring to the center "click" position (Still playback mode).

❸ Turn the Jog Dial clockwise or counterclockwise.
- The field advance speed changes according to the speed with which the dial is turned.
- To return to normal playback, press the Play/×2 Button (▶) (LECTURE/×2) or the Jog/Shuttle Button (IMAGE/IMAGE/RAPIDE).

Turning the Jog Dial
- Every turn of approx. 30° will advance or reverse the tape by one field.
- A turning speed of the Jog Dial of more than 3 rotations per second corresponds to the normal playback speed.

Slow Tracking Control
- When noise bars appear during Super Still, Super Still Advance or Super Fine Slow playback, switch over to Slow playback and adjust with the Tracking (+) or (−) Button (ALIGNEMENT) to reduce the noise bars.
- It may not be possible to eliminate the noise bars completely.

Operating the Shuttle Function with the Shuttle Ring on the Remote Controller

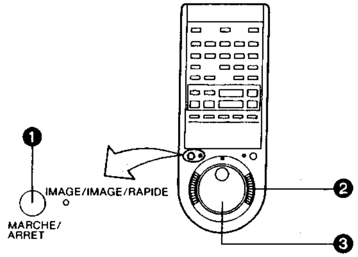


Jog/Shuttle (IMAGE/IMAGE/RAPIDE) Indicator

- The operation is the same as steps ❶ and ❷ described on the VTR.

With the Shuttle Ring, the following playback functions can be selected: Normal playback in forward and reverse direction, Still playback, Cue & Review playback at 5 times (5) and 9 times (19) normal speed as well Slow motion playback in forward and reverse direction at ⅕th of normal speed.
[The figures in parentheses indicate the speed for recordings in the VL mode.]

Operating the Jog Function with the Jog Dial on the Remote Controller

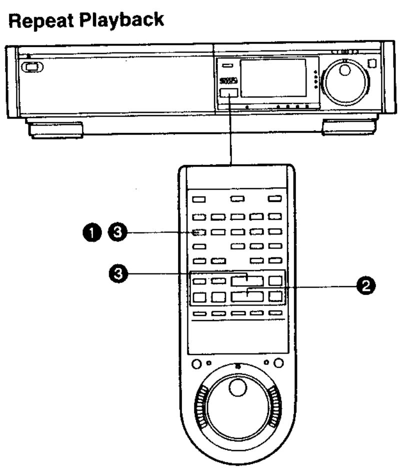


The operation is the same as the operation steps ❶ to ❸ on this page.

- To return to normal playback, press the Play/×2 Button.
- To be able to use the Jog or Shuttle function when the Jog/Shuttle Indicator is not lit, simply press the Jog Shuttle Button again.
- After finishing with the Jog or Shuttle function, press the Jog/Shuttle Button to turn off the Jog/Shuttle Indicator.
- Although the Jog/Shuttle Indicator on the VTR may light up during operation with the Remote Controller, all operations should be made via the Remote Controller.

PLAYBACK (CONT'D)

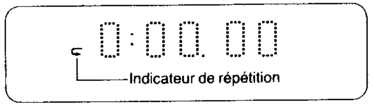
Repeat Playback



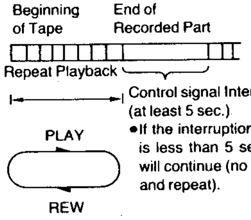
Repeat Playback between the Beginning of the Tape and the End of the Recorded Part

To play back the tape repeatedly between the beginning of the tape and a place where the video signal is interrupted for at least 5 seconds (see diagram below).

❶ Press the Memory/Repeat/Search Button (MEMOIRE/REP./RECH.) so that the Repeat Indicator " ⊂ " lights up.


⊂ 0:00.00
Indicateur de répétition

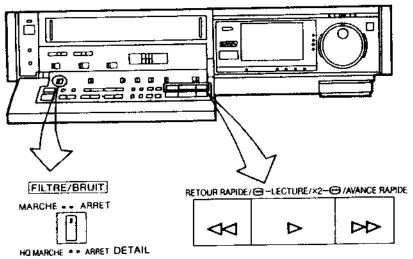
❷ Press the Play/×2 Button (▶) (LECTURE/×2).
- The playback will continue until the VTR detects the end of the video recording (no control signal for more than 5 seconds). At this point, the tape will be rewound to the beginning and the playback will be repeated.


Beginning of Tape
End of Recorded Part
Repeat Playback
Control signal Interruption (at least 5 sec.)
PLAY
REW

- If the interruption of the control signal is less than 5 seconds, the playback will continue (no rewind from this point and repeat).

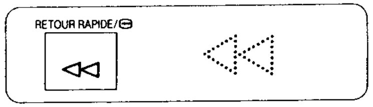
❸ To stop the Repeat playback, press either the Stop Button or the Memory/Repeat/Search Button (MEMOIRE/REP./RECH.) (the Repeat Indicator "R" will go out).

Note:
- If a short tape portion is played back many times, the tape may become damaged at that part.

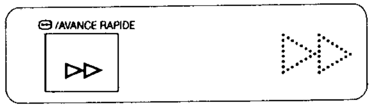

FILTRE/BRUIT
MARCHE • • ARRET
HQ MARCHE • • ARRET DETAIL
RETOUR RAPIDE/⊖-LECTURE/×2-⊖/AVANCE RAPIDE

Rewind and Fast Forward

Press the Rewind ◀◀/Review ⊖ Button (RETOUR RAPIDE/⊖) to rewind the tape.

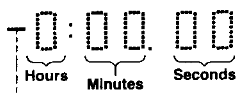

RETOUR RAPIDE/⊖

Press the Fast Forward ▶▶/Cue ⊖ Button (⊖/AVANCE RAPIDE) to wind the tape forward rapidly.


⊖/AVANCE RAPIDE

Lap Time Counter

It shows the elapsed recording or playback time.


-0:00.00
Hours
Minutes
Seconds

The "–" indication will appear when the tape is rewound further than the tape counter position "0:00.00".

- If the figures on the Tape Counter do not change during Fast Forward, Rewind or any of the Playback functions, this means that nothing is recorded on that tape section.
- The Tape Counter is automatically reset to "0:00.00" when the video cassette is inserted.

Auto Cue and Play

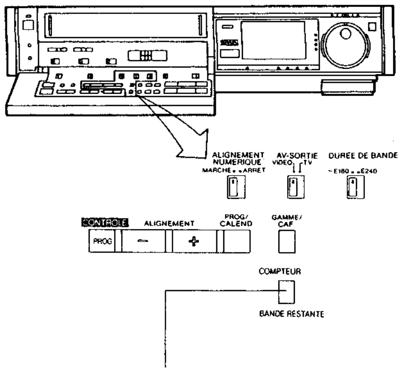
When inserting a video cassette which has the erasure prevention tab removed playback will start automatically. If nothing is recorded on the part of the tape where playback is started, the VTR will automatically be in the Cue playback mode until the recorded part is reached, then it changes back to normal playback mode.

This applies only to previously unused tapes. Tapes which have been erased or re-recorded will not exhibit this feature.

Noise Filter/Detail Selector

DETAIL ARRET: For editing operations such as dubbing.
HQ MARCHE: For ordinary use of the VTR.
FILTRE/BRUIT. MARCHE: For playback of tapes with inferior picture quality caused, for example, by repeated dubbing.

- When the Noise Filter/Detail Selector is set to "DETAIL ARRET", the picture sharpness cannot be adjusted with the Picture Sharpness Control.
- When playing back S-VHS recordings, the "NOISE FILTER ON" (FILTRE/BRUIT. MARCHE) position will have no effect.

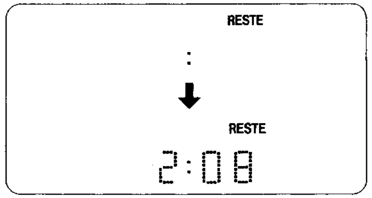


Counter/Remaining Tape Time Selector Button (COMPTEUR/BANDE RESTANTE)

When the VTR is turned on, this button can be pressed to change the display mode of the Multi-Function Display between "COMPT" (Tape Counter) and "RESTE" (Remaining Tape Time).

Indication of the Remaining Tape Time

When the Counter/Remaining Tape Time Selector Button on the VTR (or the Tape Remain Button on the Remote Controller) is pressed, the approximate remaining tape time will be displayed in hours and minutes.



- The Remaining Tape Time Indication will remain displayed even after the tape is ejected. However, when next inserting a cassette, this indication will be cancelled.
- This functions lets you know the remaining tape time even during Rewind and Fast Forward Operations.
- If this button is pressed while the VTR is in the stop mode, playback will start automatically and continue until the remaining tape time has been calculated and is displayed, and the VTR will then switch over to the stop mode again.
- When using a VHS-C videocassette in this VTR, the remaining tape time indication may not be correct or this indication may not appear at all.

Tape Select Switch

To obtain a correct Remaining Tape Time indication when using an NV-E240 video cassette tape, this switch must be set to the "E240" position.
When using NV-E30, 60, 90, 120, 180 or 195 video cassette tapes, set this switch to the "~ E180" position.
If cassettes with other tape lengths than the above are used, the Remaining Tape Time indication will not be precise.

Digital Tracking Selector(ALIGNEMENT NUMERIQUE)

Digital Tracking

MARCHE: Select this position for digital tracking.
When playback is started after inserting a cassette, and the VTR is turned on, the Digital Tracking function will be activated automatically, the Digital Tracking Indicator will flash for several seconds, and the tracking will be adjusted automatically (after the adjustment, the Digital Tracking Indicator will remain lit).

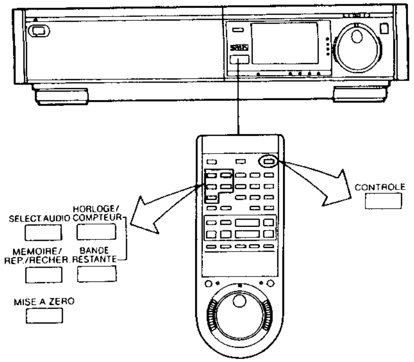
- When the Digital Tracking Indicator is lit and the tape speed (VN/VL) is changed, the Digital Tracking function will be activated. However, when operating any function other than playback, insert editing and audio dubbing, this function will not work.
- During playback, the Digital Tracking function will be activated whenever the playback changes over from an unrecorded part to a recorded part, provided the recorded part is longer than 4 seconds.

- When the picture is distorted by noise bars, press the Tracking (+) or (−) Button to select manual tracking and adjust with these two buttons. The Digital Tracking Indicator goes out.
  To change back to Digital Tracking, press the Tracking (+) and (−) Buttons simultaneously.
- The Digital Tracking function works only in the normal playback mode.

Manual Tracking

ARRET: Select this position for manual tracking.

- When the playback picture is distorted by noise bars, adjust by pressing the Tracking (+) or (−) Button.
- To return the Tracking Control to the former setting, press the Tracking (+) and (−) Buttons simultaneously.



Memory/Repeat/Search Button (MEMOIRE/REP./RECHER.)

Repeatedly pressing this button will change the indication in the following order: "M" (Memory)→" ⊂ " (Repeat)→"R" (Search)→" ⊂ R" (INDEX Repeat)→all indications are off→"M"...

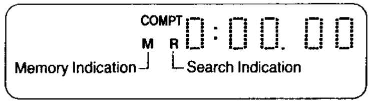
Clock/Counter Selector

By pressing this button when the VTR On/ Off Switch is set to "On", it is possible to change over the display mode of the Clock/Counter Display in the Multi-Function Display from "Clock" to "Counter" Display and vice versa.

- Even if the selector button is set for "Counter" the display will automatically changes over to "Clock" Display in all the following cases; When you set the VTR On/Off Switch to "Off", adjust the clock to present time, programme a timer recording, check a timer recording programme or programme and perform an OTR.
- When the Clock/Counter Display shows the time, the counter cannot be reset and the Memory and Search Function cannot be activated ("M", " ⊂ " and "R" indication does not light up).

Memory Function

The Memory function makes it simple and fast to find a certain position on the tape later again, simply by pressing the Reset Button at that position to set the tape counter to "0:00.00" and by pressing the Memory/Repeat/Search Button. During Rewind or Fast Forward, the tape will then stop at approximately the desired position.



- Even if the Clock/Counter Display is switched over to "Clock" Display after pressing the Memory/Repeat/Search Button, the Memory function will stop the tape at the desired position.

Search Lock Indication

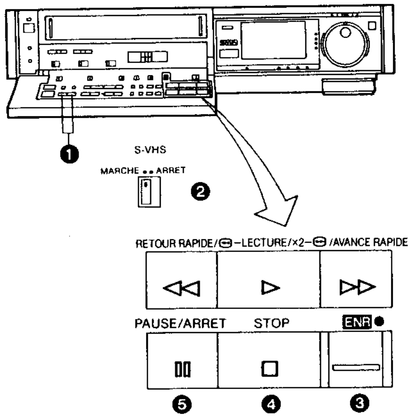
Press the Memory/Repeat/Search Button repeatedly until "S" (Search) lights up. With the VTR in the playback mode, it is now possible to perform fast picture search for about 10 minutes in forward or reverse direction. The corresponding button (Cue or Review) does not need to be kept pressed in this function.

Monitoring Function

When the Monitor Button is kept pressed during playback of a tape while the AV Selector (AV SORTIE) is set to the "VIDEO" position, the picture of the TV programme selected on the VTR will be shown. To switch back to the playback picture of the tape, release the Monitor Button.
When the AV Selector (AV SORTIE) is not set to the "VIDEO" position, this function does not work. However, if the VTR is connected to the TV set via AV cable and the AV Selector (AV SORTIE) is not set to the "VIDEO" position, the TV screen will show the picture of the selected TV programme position when the Monitor Button is kept depressed during playback of a cassette. Release the Monitor Button is order to switch back to playback.

1-9. RECORDING FROM A TV BROADCAST SIGNAL

RECORDING FROM A TV BROADCAST SIGNAL



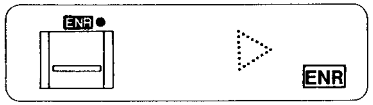
Preparation

- ●Make sure that the Timer Record Function is set to "Off".
- ●Reset the Tape Counter to "0:00.00".
- ●Insert a video cassette with the erasure prevention tab intact.
  When a video cassette is already inside the VTR, press the VTR On/Off Switch to turn it on.
- ●Set the Input Signal Source Selector (SELECTEUR D'ENTREE) to "ANT".
- ●Set the Tape Speed Selector (ENREGISTREMENT) to "VN" or "VL".

❶ Select on the VTR, the programme position (channel) to be recorded. In order to confirm proper reception, turn on the TV set and select the video playback channel.

❷ Set the S-VHS Selector to "MARCHE".
MARCHE: S-VHS cassette tape are automatically recorded in the S-VHS format and VHS cassette tapes are automatically recorded in the VHS format.
ARRET: To make a recording in the VHS format on an S-VHS cassette tape.

❸ Press the Record Button (ENR ●).



When a video cassette with broken out tab is inserted, it will be ejected automatically.

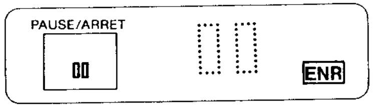
- ●During recording, the programme position (channel) on the VTR cannot be changed.
- ●To start a recording with the Remote Controller, press the two Record Buttons (ENR ●) on the Remote Controller simultaneously.

To Finish the Recording

❹ Press the Stop Button (■).

If You Wish to Avoid Recording Unwanted Material

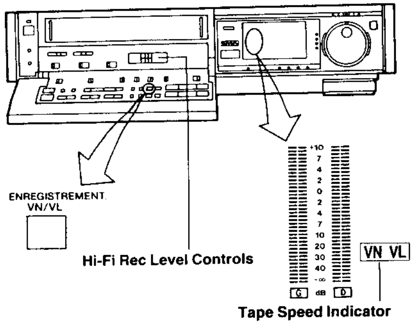
❺ Press the Pause/Still Button (❚❚) [PAUSE/ARRET] to stop the tape temporarily.



- ●Press the Pause/Still Button (❚❚) [PAUSE/ARRET] again to continue the recording.
- ●If you leave the VTR in the pause mode for more than 5 minutes, the VTR will automatically switch over to the stop mode to protect the tape and the video heads.

Recording One TV Programme While Watching Another

1. Record (following steps ❶ to ❸).
2. Press the VIDEO/TV Selector to "TV" position.
3. Select the desired programme position (channel) on your TV set.



Tape Speed Selector (VN/VL)

For recording, either of two tape speeds can be selected. During playback, the VTR will automatically select the correct speed.

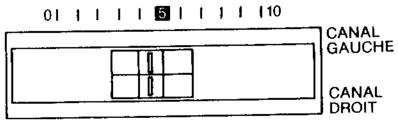
- ●VN Mode: For better picture quality.
- ●VL Mode: For longer recording time.

It is not recommended to change from the VN to the VL mode or vice versa in the middle of recording. Even if the switching is done while the VTR is in the pause mode, picture distortion will occur at the switching point during playback.

Note:
The picture quality in the VL mode is not as good as that in the VN mode.

Manual Adjustment of the Audio Recording Level

Setting the Hi-Fi Rec Level Controls to the centre "5" position (click stop) assures satisfactory audio recording results in most cases. When using the VTR as a hi-fi audio recorder or when producing your own video tapes, it may be desirable to adjust the Hi-Fi Rec Level Controls to some other position.
(It is recommended to adjust so that peaks in the audio level reach about +5 dB.)



NIVEAU D'ENREGISTREMENT Hi-Fi

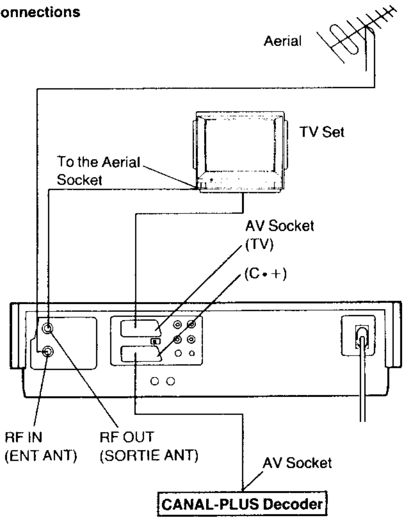
- ●The sound to be recorded on the "normal" audio track will be adjusted automatically.

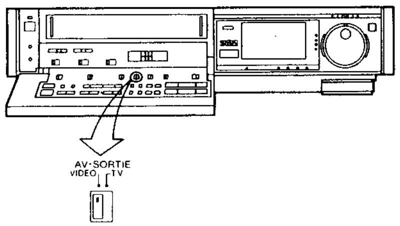
1-10. CANAL PLUS AND HI-FI AUDIO SYSTEM

CANAL PLUS

The connection of a CANAL PLUS Decoder to the AV Socket (C•+) of this VTR makes it possible to record CANAL PLUS broadcasts. When such a decoder is connected to the VTR, it is also possible to watch CANAL PLUS programmes directly on the connected TV set. So only one decoder is necessary.

Connections





Preparation

- •Turn on the VTR, the CANAL PLUS Decoder and the TV set.
- •Make sure that the Timer Record Function is set to "off".
- •Reset the Tape Counter to "0:00.00".
- •Insert a video cassette with intact erasure prevention tab.
- •The VTR must have been preset for reception of CANAL PLUS broadcasts like for any ordinary TV station as described in "SETTING THE TUNER IN THE VTR".

To Record a Canal Plus Programme While Watching the Same Canal Plus Programme

❶ Set the AV selector (AV SORTIE) to "VIDEO".

❷ To switch the VTR over to the Canal Plus reception mode, use the Channel Up or Down Button on the VTR or Programme Position (Channel) Selector Buttons on the Remote Controller to select the desired Canal Plus station (channels 90 to 99).

❸ Press the Recording Button (ENR) to start the recording.

❹ To stop the recording, press the STOP Button.

To Record a Normal TV Programme While Watching a Canal Plus Programme

① Set the AV selector (AV SORTIE) to "TV".

② Select on the VTR or with the Remote Controller the normal (non-Canal Plus) TV station (channel 1 to 89) that you want to record.

③ Press the Recording Button (ENR) to start the recording.

④ To stop the recording, press the STOP Button.

⑤ Select on the TV set the channel which is reserved for Canal Plus reception.

To Record a Canal Plus Programme While Watching a Normal TV Programme

❶ Set the AV selector (AV SORTIE) to "TV".

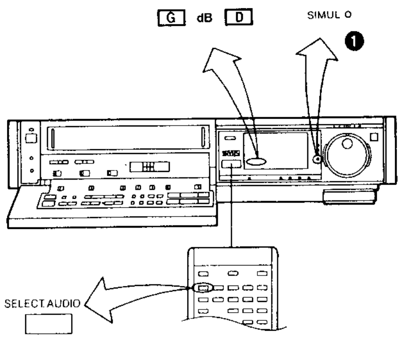
❷ To switch the VTR over to the Canal Plus reception mode, use the Channel Up or Down Button on the VTR or the Programme Position (Channel) Selector Buttons on the Remote Controller to select the desired Canal Plus station (channels 90 to 99).

❸ Press the Recording Button (ENR) to start the recording.

❹ Select the desired channel for watching on the TV set.

❺ To stop the recording, press the STOP Button.

HI-FI AUDIO SYSTEM



Recording of Simulcast Sound

Preparation

- •Connect your VTR to the Stereo Amplifier and FM Stereo Tuner as described on next page.
- •Tune the FM Stereo Tuner to the desired station.

❶ Set the Input Signal Source Selector (SELECTEUR D'ENTREE) to "Simul".
The "Simul" indicator lights up.
- •The operation procedure is the same as for normal recording; see "Recording from a TV broadcast signal".

While this switch is in the "Simul" position, the sound portion of the TV broadcast signal will be recorded only on the "normal" sound track. And the stereo sound signal received via the FM tuner will be recorded on the hi-fi sound tracks.

Playback (or Monitoring during Recording)

Press the Audio Output Mode Selector on the Remote Controller to select the desired sound mode.
At the every push of this button, the audio output mode changes as follows:

→ Stereo → Gauche → Droit → Normal audio track

and the Gauche and Droit Indicators show which sound mode is selected in the following way.

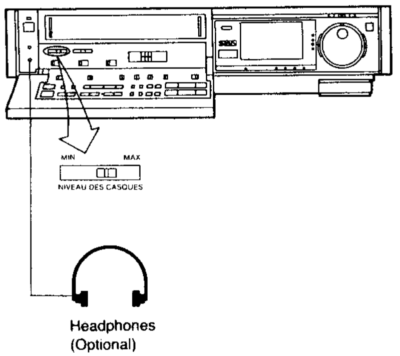
Stereo:	Both the Gauche and Droit Indicators are lit.
Gauche:	The Gauche Indicator is lit.
Droit:	The Droit Indicator is lit.
Normal:	Both the Gauche and Droit Indicators are not lit.

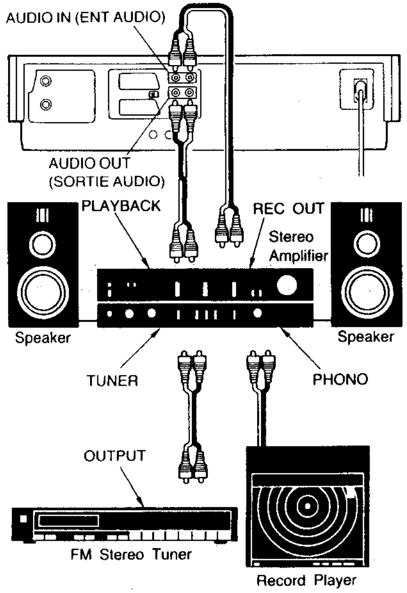
- •If a video cassette recorded on this VTR with stereo or bilingual sound is played back on a conventional VHS video recorder, the sound will be reproduced from the normal audio track (in mono).
- •If a video cassette recorded on a conventional VHS stereo video recorder is played back on this VTR, the sound reproduction of a stereo programme will be in mono. In case of a recorded bilingual programme, both language versions are reproduced mixed together (and are therefore not intelligible).

	Playback of Programmes Recorded on this VTR	**Playback of Programmes Recorded on a Conventional VHS Stereo Video Recorder**	
	Mono Programmes	Stereo Programmes	Bilingual Programmes
STEREO	Mono	——	——
GAUCHE	Mono	——	——
DROIT	Mono	——	——
NORMAL	Mono	Gauche + Droit Mixed	CH1 + CH2 Mixed

1-11. USING THE VTR AS A HI-FI AUDIO RECORDER AND SUPER OTR FUNCTION

USING THE VTR AS A HI-FI AUDIO RECORDER





Preparation

- Connect the VTR to the hi-fi audio system. (Example of a connection diagram is shown).
- Insert a video cassette with the erasure prevention tab intact.
  When a video cassette is already inside the VTR, press the VTR On/Off Switch to turn it on.
- Switch on the hi-fi audio system and select an audio source.
- For "Manual Adjustment of Audio Recording Level".

Headphones Level Control

When using headphones, the volume level can be adjusted with the Headphones Level Control.

Hi-Fi Audio Recording

Note: Selection of an audio track is not necessary for recording.

❶ Set the Input Signal Source Selector (SELECTEUR D'ENTREE) to "S-VIDEO".

❷ To start the recording, press the Record Button (●).

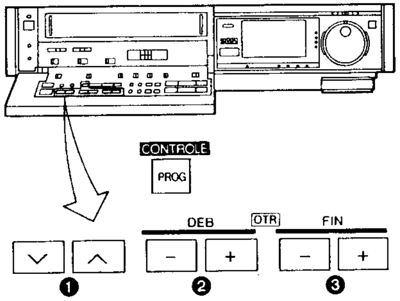
❸ To achieve smooth transitions between adjoining recordings.

Hi-Fi Audio Playback

- Press (for playback of both mono and stereo recordings) the "Audio Output Mode Selector Button" on the Remote Controller repeatedly so that the "Gauche" and "Droit" Audio output mode Indicator light up.
- To start the playback, press the Play/×2 Button (▶) (LECTURE/×2).

SUPER OTR FUNCTION (ONE-TOUCH TIMER RECORDING)

This convenient function makes it possible to easily programme the VTR for recording of TV programmes with immediate start or with start within 24 hours by precisely setting the starting time and ending time to the desired minute, and the VTR will automatically turn itself off when the recording ends.



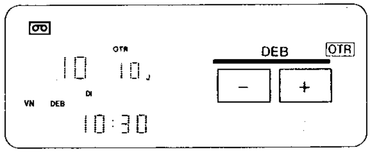
Preparation

- Make sure that the clock shows the present time correctly.
- Insert a video cassette with the erasure prevention tab intact.
  When a video cassette is already inside the VTR, press the VTR On/Off Switch to turn it on.
- Set the Input Signal Source Selector (SELECTEUR D'ENTREE) to "ANT".
- Set the Tape Speed Selector to "VN" or "VL".

It is possible to programme an OTR recording for a TV programme which will start immediately or within the next 24 hours.
(For example, OTR recording of a TV programme broadcast from 10:30 to 11:00.)

❶ Select the programme position (channel) to be recorded.

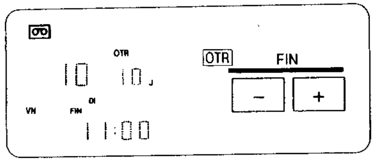
❷ Press the OTR On (+) or (−) Button (DEB) to set the OTR starting time to 10:30.



- The "OTR" indicator will be displayed.

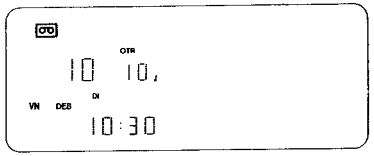
When a video cassette with broken out tab is inserted, it will be ejected automatically.

❸ Press the OTR Off (+) or (−) Button (FIN) to set the OTR ending time to 11:00.

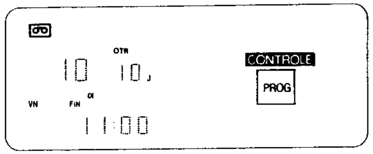


- When quickly and repeatedly pressing the OTR On (+) or (−) Button (DEB) or the OTR Off (+) or (−) Button (FIN), the corresponding time indication changes in 1-minute steps. When it is kept pressed, the indication changes in 10-minute steps.
- After setting the OTR starting time in step ❷, the OTR Off (+) or (−) Button (FIN) must be pressed within 8 seconds to select the OTR ending time, otherwise the selected starting time will be cancelled.

After 4 seconds, the display will automatically change back to the starting time indication.



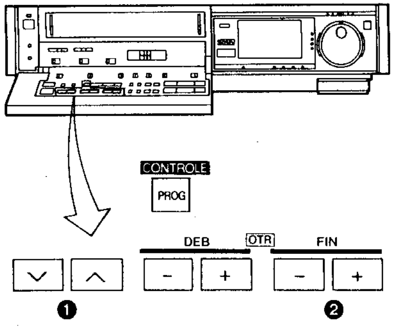
To confirm the OTR ending time, press the Check/Programme Button (CONTROLE/PROG) once. When this button is pressed twice, the display will change to the clock indication mode.



- The VTR will automatically switch off, when the OTR is completed. To turn the VTR on again, press the VTR On/Off Switch (VIDEO).

1-12. TIMER RECORDING

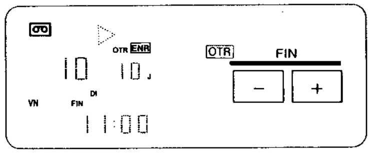
SUPER OTR FUNCTION (ONE-TOUCH TIMER RECORDING) (CONT'D)


CONTROLE
PROG
DEB
OTR
FIN
−
+
❶
❷

OTR Function with Immediate Start

❶ Select the programme position (channel) to be recorded.

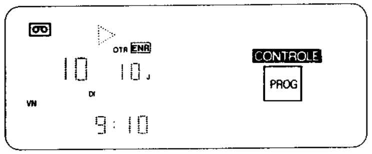
❷ Press the OTR Off (+) or (−) Button (FIN) to set the OTR ending time to 11:00.


OTR ENR
10 10.
VN FIN DI
11:00
OTR
FIN
−
+

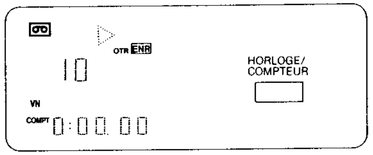
- When the tab of the inserted video cassette is broken out, it will be ejected automatically.
- The "OTR" indicator will be displayed.

- The VTR will automatically switch off, when the OTR is completed. To turn the VTR on again, press the VTR On/Off Switch (VIDEO).

When the Check/Programme Button (CONTROLE/PROG) is pressed once, the present time will be displayed.


OTR ENR
10 10.
VN DI
9:10
CONTROLE
PROG

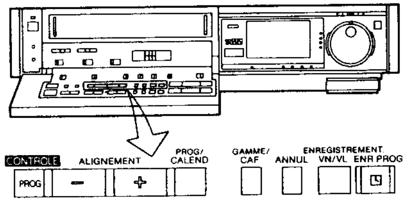
When the Clock/Counter Selector Button (HORLOGE/COMPTEUR) on the Remote Controller is pressed during OTR recording, the display will change over to the counter mode.


OTR ENR
10
VN
COMPT 0:00.00
HORLOGE/
COMPTEUR

- When the tape reaches its end during an OTR the VTR will turn itself off.
- Make sure that the OTR Function (One-Touch Timer Recording) does not overlap a programmed timer recording. An OTR always takes precedence over a timer recording.
- It is possible to change the OTR starting time or the ending time before the recording starts.
- It is possible to perform any VTR operation (except timer recording) until the recording starts.
- It is possible to change the OTR ending time even during the recording.
- To interrupt an OTR, press the VTR On/Off Switch (VIDEO) to turn the VTR off.

TIMER RECORDING

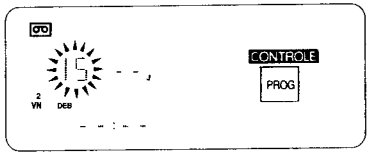
The programming of timer recordings is possible both on the VTR itself and via the Digital Scanner.
Programming of as many as 8 timer recording is possible up to one month in advance.


CONTROLE
PROG
ALIGNEMENT
−
+
PROG/
CALEND
GAMME/
CAF
ANNUL
ENREGISTREMENT
VN/VL
ENR PROG

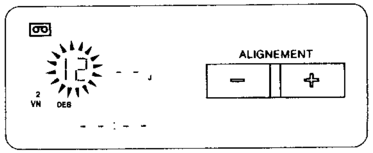
Preparation
- Make sure that the clock shows the present time correctly.
- Make sure that the Timer Record Function is set to "Off".
- Set the Input Signal Source Selector (SELECTEUR D'ENTREE) to "ANT".
- Insert a video cassette with the erasure prevention tab intact.
  When a video cassette is already inside the VTR, press the VTR On/Off Switch (VIDEO) to turn it on.

For Example:
Programming a timer recording for a TV programme that will be broadcast on Wednesday, October 27, from 10:30 to 11:45, on programme position (channel) 12, on timer programme number 2. (Present date= October 10, 1999)

❶ Press the Check/Programme Button (CONTROLE/PROG) to select the next unoccupied timer programme number.
- Press the Tape Speed Selector Button until the Indicator of the desired tape speed ("VN" or "VL") is lit in the Multi-Function Display.

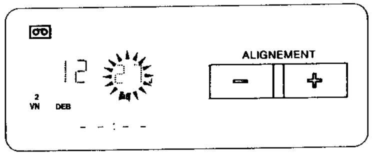

15
2
VN DEB
--:--
CONTROLE
PROG

❷ Press the (+) or (−) Button to select the programme position (channel) on which the TV programme will be broadcast.


12
2
VN DEB
--:--
ALIGNEMENT
−
+

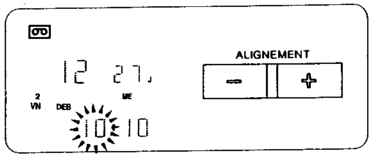
❸ Press the Next Button (PROG/CALEND).

❹ Press the (+) or (−) Button to set the date.


12 27
2
VN DEB
--:--
ALIGNEMENT
−
+

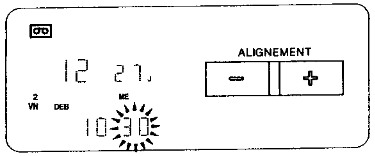
❺ Press the Next Button (PROG/CALEND).

❻ Press the (+) or (−) Button to select the hour of the starting time of the TV programme.


12 27.
2
VN DEB ME
10:10
ALIGNEMENT
−
+

❼ Press the Next Button (PROG/CALEND).

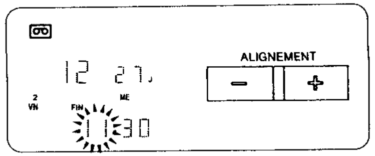
❽ Press the (+) or (−) Button to select the minute of the starting time of the TV programme.


12 27.
2
VN DEB ME
10:30
ALIGNEMENT
−
+

❾ Press the Next Button (PROG/CALEND).

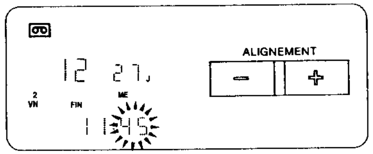
TIMER RECORDING (CONT'D)

⑩ Press the (+) or (−) Button to select the hour of the end time of the TV programme.

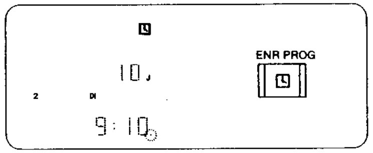


⑪ Press the Next Button (PROG/CALEND).

⑫ Press the (+) or (−) Button to select the minute of the end time of the TV programme.



⑬ Press the Timer Record Button (ENR PROG).



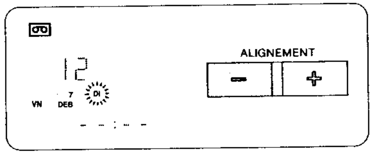
- The tape speed (VN/VL) can be selected in any of the steps ❶ to ⓬.

For Everyweek Recording

For Example:
Programming a timer recording for a TV programme that is broadcast every week on Sunday, from 10:30 to 11:45 on timer programme number 7.
Programming for everyweek recording can be made on any of the timer programme numbers 1–8.

Execute the operation steps ❶ to ❸.

❹ Press the (−) Button repeatedly until the "DI" Indicator (=Sunday) is lit.



Perform the operation steps ❺ to ⓭.

For Everyday Recording

For Everyday Recording, you have the choice between 3 different modes: Monday through Friday, Monday through Saturday, and Sunday through Saturday.

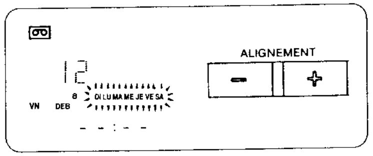
LU MA ME JE VE —— ①
LU MA ME JE VE SA —— ②
DI LU MA ME JE VE SA —— ③

For example:
Programme time for timer recording every day from 10:30 to 11:45 on timer programme number 8.

Programming for everyday recording can be made on any of the timer programme numbers 1–8.

Execute the operation steps ❶ to ❸.

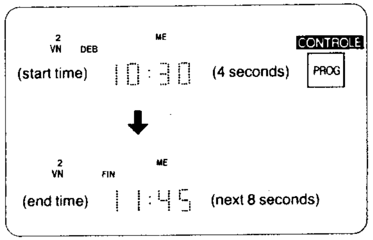
❹ Press the (−) Button until the desired type of Everyday Recording (①, ②, ③) is displayed.



Perform the operation steps ❺ to ⓭.

To Confirm the Programme of a Timer Recording

Make sure that the VTR is turned on.
Make sure that the Timer Record Function is set to "On".
Select the programme number to be checked, by repeatedly pressing the Check/Programme Button (CONTROLE/PROG).
The preset channel and start and ending times of the timer recording will be indicated for about 12 seconds.



To Cancel a Timer Recording

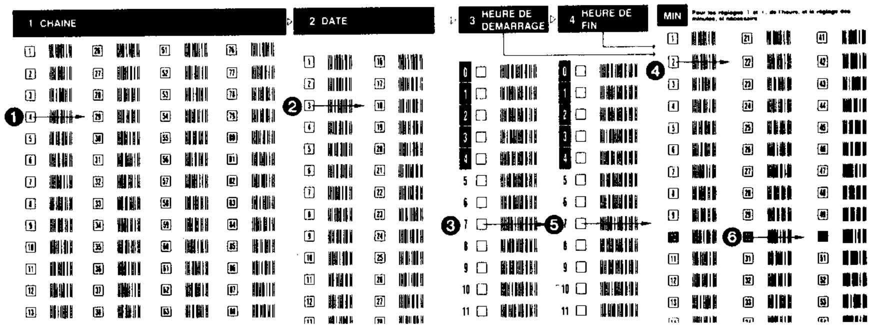
Make sure that:
the VTR is turned on,
the Timer Record Function is set to "Off".

❶ Press the Check/Programme Button (CONTROLE/PROG) repeatedly, until the number of the timer programme that you want to cancel is displayed.

❷ Press the (+) and (−) Buttons simultaneously for more than 3 seconds.

- After the programmed timer recording has been made, set the Timer Record Function to "Off", otherwise the VTR cannot be operated normally.
- During recording, the programme position (channel) on the VTR cannot be changed.
- When you want to watch TV after setting a timer recording, select the desired channel on the TV set.
- To cancel a timer recording during recording, set the Timer Record Function to "Off".
- It is impossible to confirm programmes of timer recordings while an OTR is being performed.
- To turn the VTR on and use it for playback or recording before the timer recording is performed, set the Timer Record Function to "Off".
- When the Timer Record Function is set to "On" but no video cassette is inserted or no timer recording has been programmed, the Timer Recording Indicator ◫ will flash to inform that the timer recording cannot be performed.
- If no cassette is inserted in the VTR, the "▬" Mark will flash.

TIMER RECORDING (CONT'D)



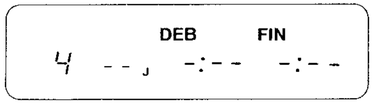
TIMER RECORDING BY USING THE DIGITAL SCANNER

Tracing the Bar Codes

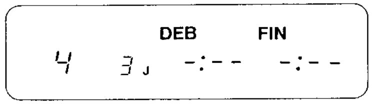
Example: When programming a timer recording for a programme that will be broadcast on channel position 4 on the 3rd of the month, from 7:02 to 7:30, trace the bar codes in the order of the numbered arrows shown below.

- Set the Digital Scanner On/Off Switch (MARCHE/ARRET) to "MARCHE".

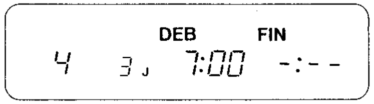
❶ Trace the bar code for "CHANNEL (CHAINE)".



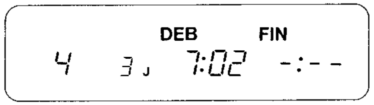
❷ Trace the bar code for "DATE".



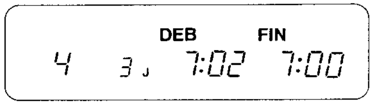
❸ Trace the bar code for "START TIME (HEURE DE DEMARRAGE)".



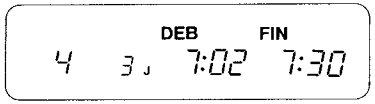
❹ Trace the bar code for "MIN".



❺ Trace the bar code for "END TIME (HEURE FIN)".



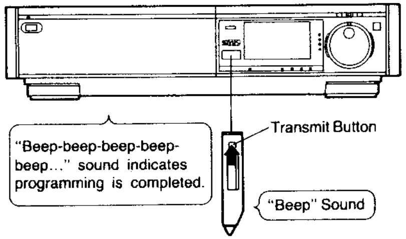
❻ Trace the bar code for "MIN".



- The "Bee Bee Bee Bee Beeeeep" sound signals that the scanner is now ready for data transmission.
- When no sound is heard, read the bar codes once again.
- If more than one bar code is read in the same group, only the last code will be effective.
- If the "CANCEL (ANNULATION)" bar code is read, all bar codes that have been read so far will be cancelled.

Transmit the Programming Data

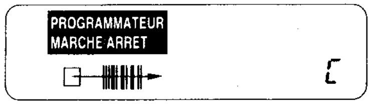
Keep pressing the Transmit Button and confirm that the programmed data on the Multi-Function Display of the VTR are as desired.
After releasing the button, the data will continue to be displayed for about 12 seconds.


"Beep-beep-beep-beep-beep..." sound indicates programming is completed.
Transmit Button
"Beep" Sound

- If the transmission was not received correctly, the "Beep-Beep, Beep-Beep" sound from the VTR will warn you. In this case, perform transmission again.
- The transmission is possible when the VTR is turned on but is not in any of the recording or playback operation modes. It is also possible when the VTR is in the timer recording standby mode (◷ indication is lit).
- The programming will be done on the next lower unoccupied timer programme number (8–1).
- If all programme numbers are occupied, the "Beep-Beep, Beep-Beep" sound from the VTR will warn you that the programming cannot be made.
- When the Transmit Button is pressed, the VTR will automatically be put into the timer recording standby condition and the VTR will be turned off.
- To operate the VTR before the timer recording will be performed, press the Timer Rec. Button to suspend the timer recording standby condition. After using the VTR, be sure to press the Timer Rec. Button again, otherwise the timer recording will not be made.

TIMER ON/OFF

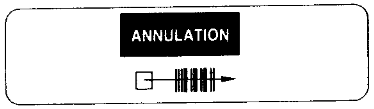
After programming a timer recording, the VTR is in the timer recording standby mode and cannot be used for any other operation, such as playback. If some other operation is desired, first trace the "TIMER ON/OFF (PROGRAMMATEUR MARCHE ARRET)" bar code and transmit it to the VTR with the Transmit Button.
To later reset the VTR to the timer recording standby mode, trace the "TIMER ON/OFF (PROGRAMMATEUR MARCHE ARRET)" bar code again and transmit it with the Transmit Button.



For Programming More Than One Timer Recording in Succession

Repeat the following operation steps ❶-❸.

❶ Trace the "CANCEL (ANNULATION)" bar code on the Programming Sheet.

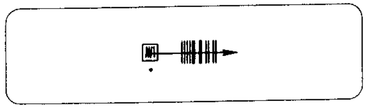


❷ Trace the bar codes for "CHANNEL (CHAINE)", "DATE", "START TIME (HEURE DE DEMARRAGE)" and "END TIME (HEURE DE FIN)".

❸ Confirm that the present time is displayed on the Multi-Function Display of the VTR, and transmit the data.
- If the next timer programming data are transmitted while the previous timer programming data are still being displayed, the displayed timer recording data will be cancelled.

Timer Recording from an External Source

To programme a timer recording for signals input from an other AV source through the AV Socket on this VTR, trace the "AV 1" or "AV" bar code in the "CHAINE" column.



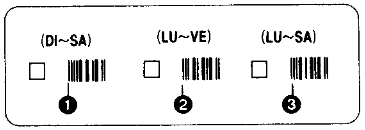
Note:
The "AV 2" bar code cannot be used with this VTR.

1-13. PROGRAMMING CANAL PLUS

TIMER RECORDING (CONT'D)

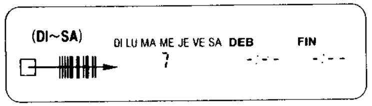
For Everyday Recording

When programming an everyday recording using the bar codes, you have the choice between 3 different modes: Sunday through Saturday, Monday through Friday, and Monday through Saturday.

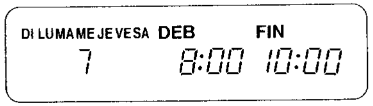

(DI~SA)
(LU~VE)
(LU~SA)
❶
❷
❸

① Turn on the Digital Scanner and trace the "CHANNEL (CHAINE)" bar code.

② Trace the desired "EVERYDAY (QUOTIDIEN)" bar code (❶, ❷, ❸).


(DI~SA)
DI LU MA ME JE VE SA
DEB
FIN
7
-:--
-:--

③ Trace the "START TIME (HEURE DE DEMARRAGE)" and then the "END TIME (HEURE DE FIN)" bar codes, and transmit the data to the VTR.

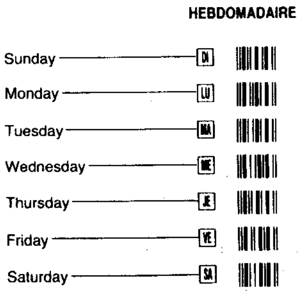

DI LUMAMEJEVESA
DEB
FIN
7
8:00
10:00

- Everyday recording will be performed from that day on.
- If a "DATE" bar code is traced after tracing the "EVERYDAY (QUOTIDIEN)" bar code, everyday recording will not be performed.

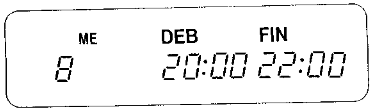
For Everyweek Recording

① Turn on the Digital Scanner and trace the "CHANNEL (CHAINE)" bar code.

② Trace the bar code for the desired day of the week among the "EVERYWEEK (HEBDOMADAIRE)" bar codes.


HEBDOMADAIRE
Sunday
DI
Monday
LU
Tuesday
MA
Wednesday
ME
Thursday
JE
Friday
VE
Saturday
SA

③ Trace the "START TIME (HEURE DE DEMARRAGE)" and then the "END TIME (HEURE DE FIN)" bar codes, and transmit the data to the VTR.

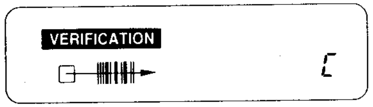

ME
DEB
FIN
8
20:00
22:00

- Everyweek recording will be performed from that week on.
- If a "DATE" bar code is traced after tracing the "EVERYWEEK (HEBDOMADAIRE)" bar code, everyweek recording will not be performed.

To Confirm the Programme of a Timer Recording

To perform this operation, the VTR must be turned on or it must be in the timer recording standby mode (⏲ indication is lit).

❶ Trace the "CHECK (VERIFICATION)" bar code.


VERIFICATION
C

❷ Perform transmission.
- After releasing the Transmit Button, the programmed data will be displayed for about 12 seconds on the Multi Function Display.
- At every push of the Transmit Button, the timer programme number advances to the next higher number.

To Cancel a Programmed Timer Recording

To perform this operation, the VTR must be turned on but not be in any of the recording or playback operation modes, or it must be in the timer recording standby mode (⏲ indication is lit). To cancel a programmed timer recording, its data must be displayed on the Multi-Function Display. If they are no longer displayed, first, trace the "CHECK (VERIFICATION)" bar code and perform transmission (several times, if necessary, until the programme you want to cancel is displayed). Then, within 12 seconds:

① Trace the "CANCEL (ANNULATION)" bar code.

② Perform transmission.
- To programme a new timer recording, perform the programming from the beginning.

PROGRAMMING CANAL PLUS

Reception and Decoding of Canal Plus

The VTR NV-FS100HF makes it possible to record decoded Canal Plus programmes without the need to manually switch the input and output connections between the Canal Plus Decoder, the TV set and the VTR.

For this purpose, the programme positions (channels) 90 to 99 of the VTR are reserved for memorizing of the local frequency of Canal Plus.

When one of the programme positions (channels) between 90 and 99 is used, the video signal is automatically sent to the Canal Plus Decoder.
However, if Canal Plus were tuned on programmed position 4, the signal would not be sent to the Decoder.

In other words, if programme position (channel) 4 were used for Canal Plus, this channel would never be decoded.

Programming with the Help of Bar Codes in TV Programme Magazines

The bar code published in certain TV Programme Magazines has only one block of bars which contain the following programming informations:

Channel No. (No. 4 for Canal Plus)

Broadcasting Date

Starting Time

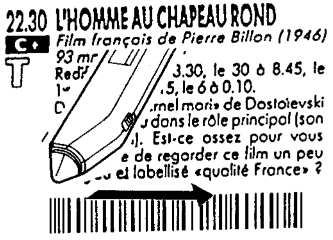
Ending Time

Automatic Changeover to Recording Standby

This means that if bar codes TV Programme Magazines are used for programming timer recordings of Canal Plus programmes on the VTR NV-FS100HF, the Canal Plus Decoder will operate when this timer programming is carried out.

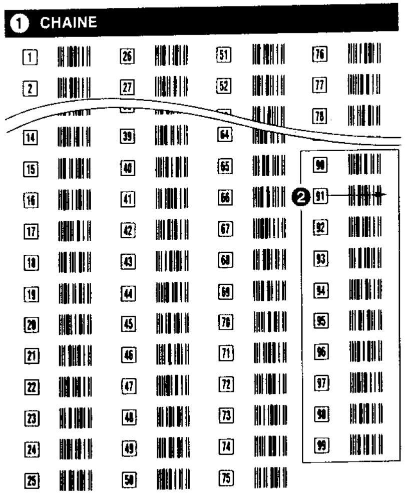
Tracing Bar Codes from TV Programme Magazines

❶ Trace the bar codes with the Digital Scanner in the same way as the bar codes of the Programming Sheet.


22.30 L'HOMME AU CHAPEAU ROND
C+
Film français de Pierre Billon (1946)
93 mr
Redif
3.30, le 30 à 8.45, le
.5, le 6 à 0.10.
mel mori» de Dostoïevski
dans le rôle principal (son
Est-ce assez pour vous
e de regarder ce film un peu
et labellisé «qualité France» ?

Changing the Channel Number

❷ Use the supplied Programming Sheet and in the column "CHAINE" trace the bar code for the number of the programme position (channel) on which the Canal Plus has been tuned (programme positions 90 to 99).

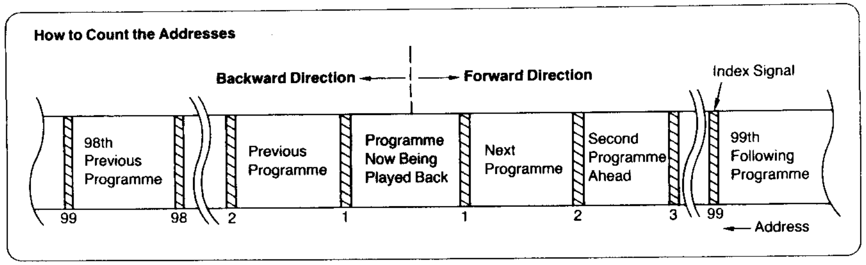

❶ CHAINE
1
2
14
15
16
17
18
19
20
21
22
23
24
25
26
27
39
40
41
42
43
44
45
46
47
48
49
50
51
52
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
90
91
92
93
94
95
96
97
98
99
❷

Transmitting to the VTR

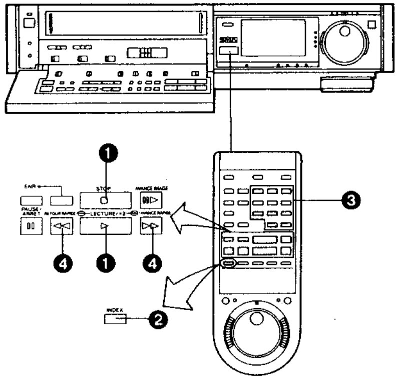
❸ Complete the programming operation as usual by transmitting the programming data from the Digital Scanner to the VTR.

1-14. VHS INDEX SEARCH SYSTEM

VHS INDEX SEARCH SYSTEM

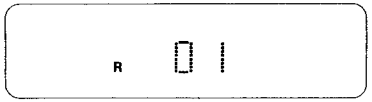


With the VHS Index Search function, up to 99 addresses (places where index signals are recorded) can be skipped to directly locate the beginning of the desired programme in both forward and reverse direction in the Fast Forward or Rewind mode.

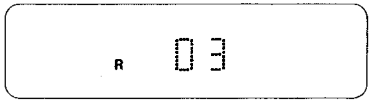


❶ Press the Play/×2 Button (▶) (LECTURE/×2) or Stop Button (■).

❷ Press the Index Button.



❸ Input the number of programmes that you want to skip by pressing the number buttons.



- If you made a mistake, press the Index Button twice and input the correct number.

❹ Press the Rewind ◀◀/Review ⊟ (RETOUR RAPIDE/ ⊟) or Fast Forward ▶▶/Cue ⊟ Button (⊟/ AVANCE RAPIDE) to start the VHS Index Search function (the VTR will switch to the rewind or fast-forward mode).

- Every time an index signal (address) is skipped the number in the Address Indication decreases by one.
- When the preset address is reached, the Tape Counter Indication will appear in place of the Address Indication, and the normal playback will start.
- To abort the Index Search function midway, press the Play/×2 or the Stop Button.

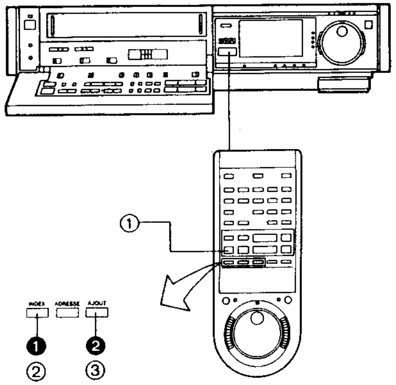
- When activating the VHS Index Search function from the Still playback mode, the Playback will start when the selected programme is reached.
- If the VHS Index Search function is started extremely close to the beginning of the next programme (place where an address signal is recorded) or from the beginning of the tape, the first address may not be counted.
- If there are unrecorded parts on the tape, or if recordings have repeatedly been made on the same tape portion, the VHS Index Search function may not work correctly.

Recording of Index Signals

Index signals can be recorded during recording or on an already recorded tape.

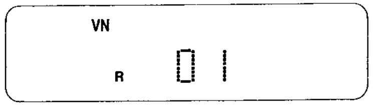
Index signals will be recorded automatically in the following cases:

- At the tape position at which the Record Button is pressed to start recording.
- At the tape position at which a Timer Recording is started.
- At the tape position at which an OTR recording is started.

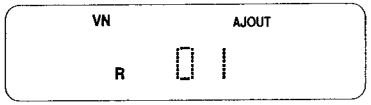


Recording Additional Index Signals During Recording

❶ Press the Index Button.



❷ Press the Write Button (AJOUT) at a position that you want to mark with an index signal for easy, quick locating during playback.

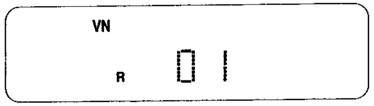


- The Write (AJOUT) Indicator will be lit for a few seconds.
- If the Write Button (AJOUT) is pressed while the VTR is in the recording pause mode, the pause mode is release and the recording starts.
- To change the Multi-Function Display from the Index indication mode to the Counter indication mode, press the Index Button.

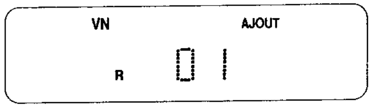
Recording Index Signals on Already Recorded Tapes

① During playback, press the Pause/Still Button at the tape position that you want to mark with an index signal.

② Press the Index Button.



③ Press the Write Button (AJOUT).



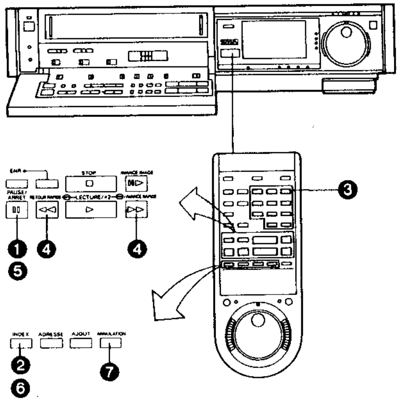
- When the Write Button (AJOUT) is pressed, the tape will be rewound a little, and Playback will start and the index signal will be recorded.
- The Write (AJOUT) Indicator will be lit for a few seconds.
- When the recording of the index signal is completed, the Multi-Function Display changes over from the index indication to the counter indication mode, and the playback will automatically restart.

- Recording of index signals is not possible on cassettes with broken out tab.
- When recording index signals, take care that the interval between two index signals is at least 2 minutes (VN mode) and 5 minutes (VL mode).
- While the Write Indicator is lit, no other VTR functions can be operated.

1-15. VHS ADDRESS SEARCH SYSTEM

VHS INDEX SEARCH SYSTEM (CONT'D)

Erasing Unnecessary Index Signals



❶ Press the Pause/Still Button (PAUSE/ARRET) while the VTR is in the playback mode.

❷ Press the Index Button.

❸ Input with the Number Buttons the number of the index signal that you want to erase.

❹ Press the Fast Forward (⏩/AVANCE RAPIDE) or the Rewind (RETOUR RAPIDE/⏪) Button. When the designated index signal is reached, the VTR changes over to playback.

❺ Press the Pause/Still Button (PAUSE/ARRET) to put the VTR in the Still Playback mode.

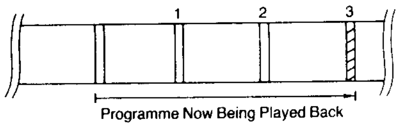
❻ Press the Index Button.

❼ Press the Erase Button (ANNULATION).

- When the Erase Button (ANNULATION) is pressed, the tape will be rewound a little before playback starts. When the index signal is reached, the Erase (ANNUL) Indicator will light up for about 10 seconds to indicate that the index signal is being erased. When the erasing is completed, the playback will continue.

Index Repeat Playback

Selecting the Address for Index Repeat Playback



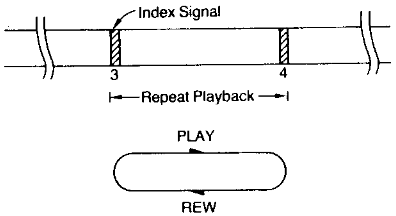
❶ Press the Play/×2 Button (▶) (LECTURE/×2) or the Stop Button (■).

❷ Press the Index Button.

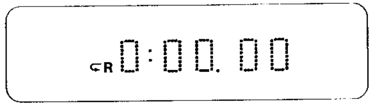
❸ Input with the Number Buttons the number of index signals that you want to skip in order to locate the index signal from which the Index Repeat Playback is to start.
- For example, press "3" to quickly advance to the fourth index signal from the present tape position.

❹ Press the Rewind ◀◀/Review ⏪ (RETOUR RAPIDE/⏪) or Fast Forward ▶▶/Cue ⏩ (⏩/AVANCE RAPIDE) Button to start the VHS Index Search function (the VTR will switch to the rewind or fast forward mode).

Performing Index Repeat Playback



❺ When the VTR is in the playback mode, press the Memory/Repeat/Search Button (MEMOIRE/REP./RECHER.) so that the " ⊂ R" Indicator lights up.

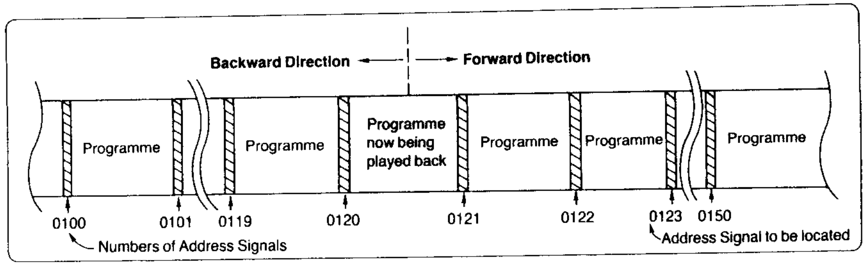


- When the next index signal is found, the tape will be rewound. When the index signal, where the playback is to start, is found, the playback will restart. In this way, automatically repeated playback can be performed for a tape portion as defined by the number of index signals that are skipped.

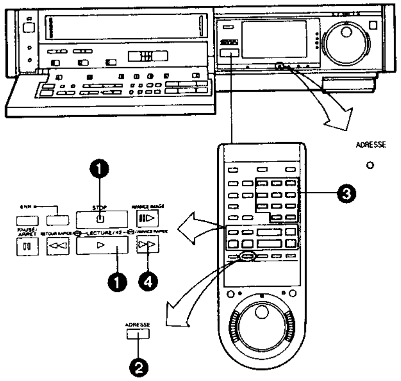
❻ To stop the Index Repeat playback, press the Stop Button or press the Memory/Repeat/Search Button (MEMOIRE/REP./RECHER.) so that the " ⊂ R" Indicator goes out.

If Index Repeat playback is performed on a tape for long periods of time, the picture quality may become inferior.

VHS ADDRESS SEARCH SYSTEM



A desired tape position can quickly be accessed by inputting the number of the corresponding Address Signal.



Inputting the Number of the Address Signal

Example: Inputting the Address Signal "0123"

❶ Press the Stop Button or the Play/×2 Button (LECTURE/×2).

❷ Press the Address Button (ADRESSE). The Address Indicator on the VTR lights up.

❸ Input the number of the Address Signal of the desired tape position with the Programme Position Selector Buttons.

❹ Press the Fast Forward ▶▶/Cue ⏩ Button (⏩/AVANCE RAPIDE) to start the search for the desired tape position.
- To stop the interrupt the Address Signal Search function, press the Play/×2 Button (LECTURE/×2) or the Stop Button.
- To search for an Address Signal in reverse direction, press the Rewind ◀◀/Review ⏪ Button (RETOUR RAPIDE/⏪).

During the VHS Address Signal Search
- Whenever an Address Signal is passed, its number will be indicated.
- When the selected Address Signal is reached, playback will start automatically.
- The fast forwarding or rewinding speed will be slightly slower than normal.

When starting the VHS Address Signal Search from the Still Playback Mode

When the selected Address Signal is reached, the VTR changes over to normal playback, and the Multi-Function Display changes back to the tape counter indication.

When the selected Address Signal cannot be Found
- When the tape reaches its end during the VHS Address Signal Search in forward direction, the Multi-Function Display changes back to the tape counter indication and the tape will be rewound automatically.
- When the tape reaches its end during the VHS Address Signal Search in reverse direction, the Address Indication will remain displayed and the tape will be stopped.

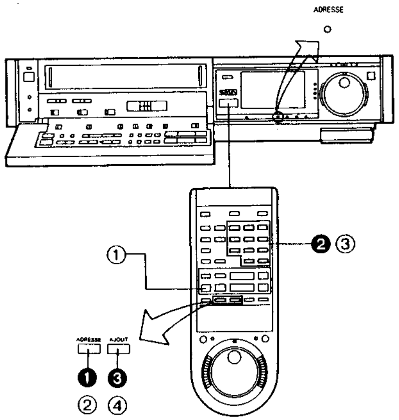
Finding out the Address Signal Number of a Certain Scene

Press the Address Button during fast-forwarding or rewinding of the tape.
- Whenever an Address Signal is passed, its number will be indicated in the Multi-Function Display.
- To change back to the tape counter indication, press the Address Button once more.
- When the Address Number "0000" is written on the tape, playback will start at the position.

VHS ADDRESS SEARCH SYSTEM (CONT'D)

Writing Address Signals

Address Signals can be written both during recording and playback.



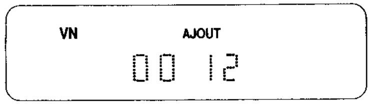
Writing Address Signals during Recording

Example: Writing Address Signal "0012".

❶ Press the Address Button (ADRESSE). The Address Indicator on the VTR will lights up.

❷ Input the desired number with the Programme Position Selector Buttons.

❸ Press the Write Button (AJOUT) at the tape position which you want to mark with the set number.



- To change back to the tape counter indication, press the Address Button once more.
- When writing an Address Signal while the VTR is in the recording pause mode, the pause mode will be cancelled, the recording will start and an Address Signal will be written.
- While an Address Signal is being written, the Write Indicator will be lit for several seconds.

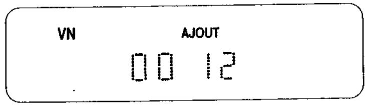
Writing Address Signals during Playback

① Press the Pause/Still Button (PAUSE/ARRET) at the tape position, which you want to mark with an Address Signal. The VTR is in the Still Playback mode.

② Press the Address Button (ADRESSE). The Address Indicator on the VTR will lights up.

③ Input the desired number with the Programme Position Selector Buttons.

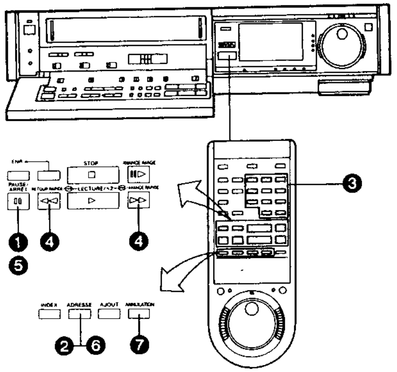
④ Press the Write Button (AJOUT).



- While an Address Signal is being written, the Write Indicator lights up for several seconds.
- After the writing of the Address Signal is finished, the Multi-Function Display will change back to the tape counter indication.

- While the Write Indicator is lights up, no other functions are operable, and the sound on the normal sound track will be blanked for this duration.
- If the erasure prevention tab of the cassette is broken out, it is not possible to write Address Signals.
- Address Signals must be spaced at least 2 minutes (VN mode) and 5 minutes (VL mode).

Erasing Unnecessary Address Signals



❶ Press the Pause/Still Button (PAUSE/ARRET) while the VTR is in the playback mode.

❷ Press the Address Button (ADRESSE).

❸ Input with the Number Buttons the number of the Address signal that you want to erase.

❹ Press the Fast Forward or the Rewind Button. When the designated Address signal is reached, the VTR changes over to playback.

❺ Press the Pause/Still Button to put the VTR in the Still Playback mode.

❻ Press the Address Button.

❼ Press the Erase Button (ANNULATION).
- The Erase Indicator lights up.

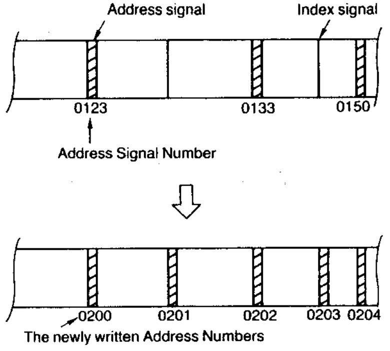
- When the erasing is completed, the playback will continue.

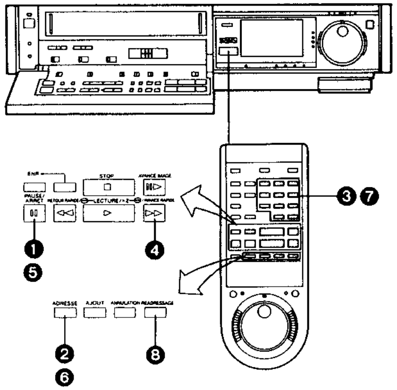
1-16. INTRO SCAN FUNCTION

VHS ADDRESS SEARCH SYSTEM (CONT'D)

Renumbering the Address Signals

It is possible to automatically and continuously renumber all Index and Address Signals on a tape starting with any desired number.





Example:
Changing all recorded Address Signals starting with the number "0123" (and all Index Signals) to new Address Signals starting with "0200".

❶ Press the Pause/Still Button (PAUSE/ARRET) during playback to change the VTR over to the Still Playback Mode.

❷ Press the Address Button (ADRESSE).

❸ Use the Programme Position Selector Buttons to select the Address Number to be located ("0123").

❹ Press the Fast Forward ▶▶/Cue ⊡ Button (⊡/AVANCE RAPIDE) to start the search.

❺ Press the Pause/Still Button.

❻ Press the Address Button.

❼ Input the new Address Number "0200" with the Programme Position Selector Buttons.

❽ Press the Renumber Button (READRESSAGE).

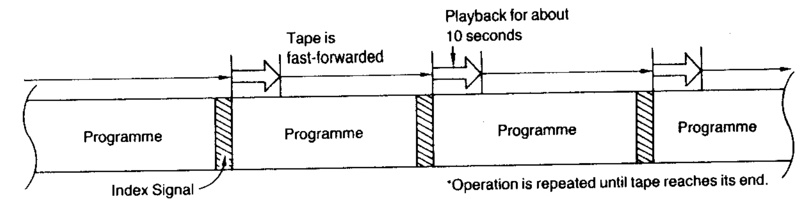
After Renumbering the Address Signals

- Such operations as fast-forward and rewinding should always be continued to the end of the tape.
- When the tape reaches its end, the tape will be rewound automatically.
- To interrupt the renumbering operation, press the Play/×2 Button or the Stop Button.

> - During the renumbering operation, the Write Indicator lit and no other functions are operable. Also, the sound on the normal sound track will be blanked for the time the Write Indicator is lit.
> - If the erasure prevention tab of the cassette is broken out, the renumbering is not possible.

INTRO SCAN FUNCTION

How the Intro Scan Function Works...

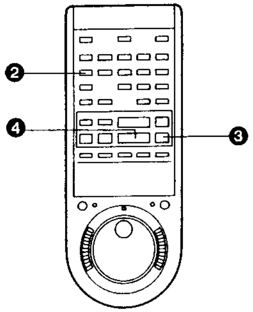


*Operation is repeated until tape reaches its end.

The Intro Scan function plays back the first 10 seconds of each programme (recorded with index signal) on a tape one after another. This is convenient for quick checking what programmes are on a tape, or to find the desired instalment of a TV series you have recorded on a tape.

> - The Intro Scan function may not be activated for the first programme recorded close to the beginning of the tape.
> - The Intro Scan function may not be activated, if the interval between programme starts is less than 5 minutes in the VL mode, or less than 2 minutes in the VN mode.

Intro Scan Operation



❶ Insert a video cassette.
(Put the VTR in the stop mode.)

❷ Press the Memory/Repeat/Search Button (MEMOIRE/REP./RECHER.) repeatedly until the "R" mark appears.

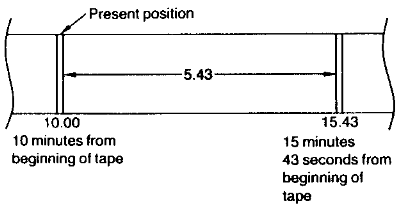
❸ Press the Fast Forward ▶▶/Cue ⊡ Button (⊡/AVANCE RAPIDE). (The Intro Scan starts.)

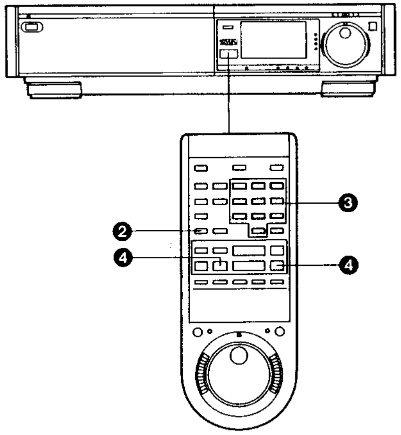
❹ When the desired scene is reached, press the Play/×2 Button (▶) (LECTURE/×2).

1-17. TIME SEARCH AND CAMERA RECORDING

TIME SEARCH

The Time Search function makes it possible to quickly advance the tape from any position by inputting the exact desired amount of playback time of the part that you want to skip.


Present position
5.43
10.00
10 minutes from beginning of tape
15.43
15 minutes 43 seconds from beginning of tape



Time Search from the Stop Mode

❶ Put the VTR in "STOP" mode.

❷ Press the Time Search Button (RECHERCHE HORAIRE).
The indication in the Multi-Function Display changes as shown below.

COMPT - : - -. - -

❸ Input the time of the desired scene.
- The time is input by pressing the number buttons in the order: hour, minute, second.
- The " – " indication will be counted as "0"

COMPT 0:05.43

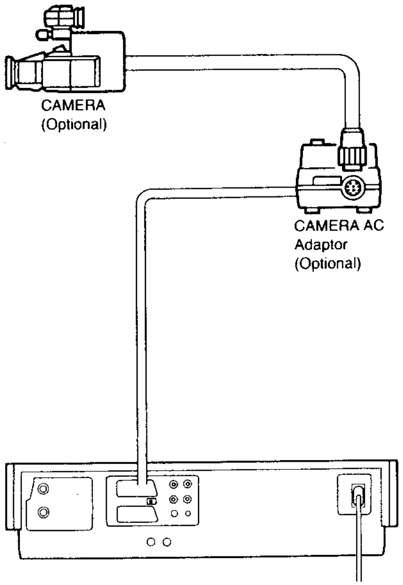
❹ Press the Fast Forward ▶▶/Cue Button (AVANCE RAPIDE) or the Rewind ◀◀/Review Button (RETOUR RAPIDE).
The playback starts after rewinding or fast forwarding to the tape position of the designated time.

Time Search from the Play Mode

The operation is the same as that for the stop mode but in operation step ❹, the Cue or Review (playback) is performed to the tape position of the designated time and the playback will then start.
If the time search function is activated during playback, a time of up to 9 minutes 59 seconds can be input.

- The numbers in the Tape Counter do not change during parts of the tape on which there is no recording.
- When the tape is inserted, the Tape Counter will automatically be reset to "0:00.00".
- When no time is input for the time search, a 2-minute tape segment is skipped and the playback will then resume.
If the time search function is activated during playback, but no time is input, a 30-second tape segment will be skipped and the playback will then resume.

CAMERA RECORDING



Preparation
- Connect the Video Camera via the Camera AC Adaptor to the VTR as shown in the illustration above.
- Set the Input Signal Source Selector (SELECTEUR D'ENTREE) to "ANT".
To make the AV Indicator appear in the Multi-Function Display, select the "0" programme position with the Channel Selection Up or Down Button on the recording VTR. [In case of the Remote Controller, press the "0/AV" Button or use the Digital Scanner to trace the AV bar code and transmit it to the VTR.]
- Insert a video cassette with the erasure prevention tab intact.
When a video cassette is already inside the VTR, press the VTR On/Off Switch (VIDEO) to turn it on.
- Set the Tape Speed Selector to "VN" or "VL".

❶ Turn the Camera AC Adaptor on and make the necessary adjustments on the camera.
Refer to the operating instructions of the camera you are using.

❷ Press the Record Button (ENR ●) on the VTR to start recording.

Avoid recording unwanted material:
Press the Pause/Still Button (❚❚) (PAUSE/ARRET) on the VTR, and the recording will stop temporarily. To restart recording, press the Pause/Still Button (❚❚), again.

❸ Press the Stop Button (■) on the VTR to stop the recording.

- For playback of a tape that was recorded via a camera, select the audio track on which the sound from the camera microphone was recorded by pressing the corresponding Audio Output mode Selector Button on the Remote Controller.
- If you leave the VTR in the pause mode for more than 5 minutes, the VTR will stop automatically to protect the tape and the video heads.
- Even if the video camera is equipped with video recorder remote control functions, this VTR can not be remote-controlled from the camera.

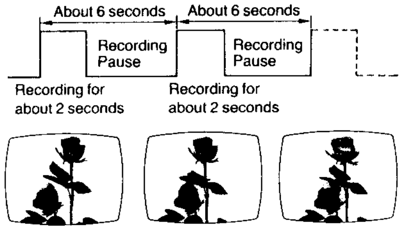
Interval Recording Function

This recording function automatically repeats recording for approx. 2 seconds and pausing for approx. 4 seconds alternately. With this function, it is possible to make recordings, for example the opening of a rose, shortened into approx. 1/3th actual time. This makes it possible to record a 24-hour event on a single NV-E240 video cassette (in the VL mode).
- This function can be used not only for camera recording, but also for recording from TV programmes.
Try using this function for various kinds of creative recording.

① Press the Pause/Still Button (❚❚) (PAUSE/ARRET) during recording.
(The VTR will be in the recording pause mode.)

② Press the Jog/Shuttle Button.
(The Interval Recording will start.)

③ To stop the Interval Recording, press the Jog/Shuttle Button or the Pause/Still Button.



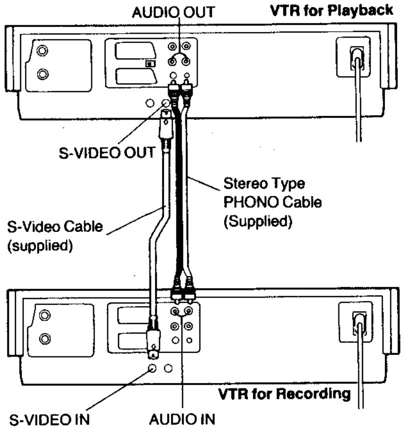
1-18. DUBBING

DUBBING (COPYING)

Dubbing (copying) from one video cassette to another.

If the VTR to Be Connected is Equipped with S-Video Socket

Perform the connection with the supplied S-Video Cable. This connection makes possible editing with better picture quality.



Preparation

- Make the necessary connections as shown in the connection diagram.
- Press the VTR On/Off Switches to turn both VTRs on.
- Set the Input Signal Source Selector (SELECTEUR D'ENTREE) to "S-VIDEO" (Recording VTR).
- Make sure that the Noise Filter/Detail Selector of both the recording and playback VTRs (if equipped) are in the "DETAIL ARRET" position. Set these switches to "HQ MARCHE" for ordinary use of the VTRs.
  (The Noise Filter/Detail Selector is on the front panel.)

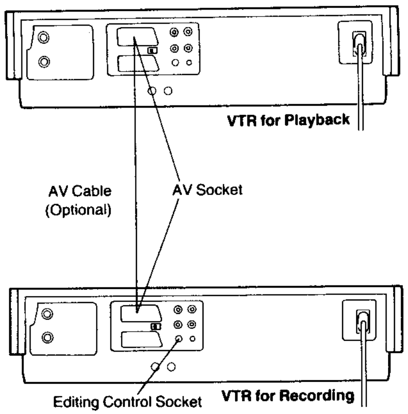
❶ Place the recorded cassette in the playback VTR and a blank video cassette with the erasure prevention tab intact in the recording VTR.

❷ Press the Record Button (ENR ●) on the recording VTR.

❸ Press the Play/×2 Button (▶) (LECTURE/×2) on the playback VTR.

❹ Press the Stop Button (■) on both VTRs to stop the dubbing.

If both VTRs are equipped with a AV Connector



Preparation

- Make the necessary connections as shown in the connection diagram.
- Press the VTR On/Off Switches to turn both VTRs on.
- Set the Input Signal Source Selector (SELECTEUR D'ENTREE) to "ANT".
  To make the AV Indicator appear in the Multi-Function Display, select the "0" programme position with the Channel Selection Up or Down Button on the recording VTR. [In case of the Remote Controller, press the "0/AV" Button or use the Digital Scanner to trace the AV bar code and transmit it to the VTR.]
- Make sure that the Noise Filter/Detail Selector of both the recording and playback VTRs (if equipped) are in the "DETAIL ARRET" position. Set these switches to "HQ MARCHE" for ordinary use of the VTRs.
  (The Noise Filter/Detail Selector is on the front panel.)

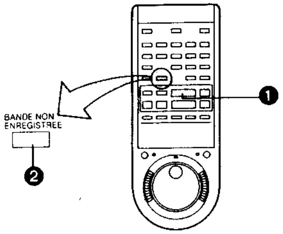
The operations are the same as shown on the left.

The NV-FS100 is equipped with an Editing Control Socket. By connecting an optional Editing Controller (VW-EC300E) to this socket, such editing functions as Assemble Editing, Insert Editing and Audio Dubbing can be performed more quickly and efficiently between two VTRs. Regarding the availability of this Editing Controller, consult with your Panasonic video dealer.

- To assure smooth, noiseless cuts when interrupting the recording, always use the Pause/Still Button (❚❚).
- To obtain smooth cuts when starting the recording from the stop mode:
  1. Play back the last part of the previously recorded material to confirm its ending point, and then press the Pause/Still Button (❚❚).
  2. Press the Record Button (●).
     (The VTR is still in the pause mode.)
  3. To start recording, press the Pause/Still Button (❚❚) again.
- The picture quality of a re-recorded tape is not as good as that of the original.

Blank Search Function

The Blank Search function is convenient to quickly locate the end of the recorded part on the tape, for example, when you want to add another recording on the same tape.

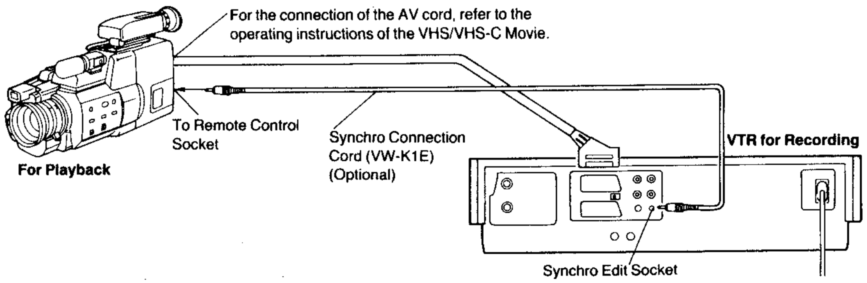


❶ Press the Stop Button to put the VTR in the Stop mode.

❷ Press the Blank Search Button (BANDE NON ENREGISTREE) on the Remote Controller.

- The tape will be fast-forwarded to the blank (non-recorded) part, and the VTR will automatically change over to Still Playback at the end of the recorded part.
- When a non-recorded part is shorter than 5 seconds of fast-forwarding time, it cannot be detected, and the Blank Search function will continue to the end of the next recording.

DUBBING (COPYING) (CONT'D)


For the connection of the AV cord, refer to the operating instructions of the VHS/VHS-C Movie.
To Remote Control Socket
Synchro Connection Cord (VW-K1E) (Optional)
VTR for Recording
For Playback
Synchro Edit Socket

Connecting to a VHS/VHS-C Movie Equipped with Synchro Edit Function

It is possible to synchronize the playback start and stop of the VHS/VHS-C Movie with the recording start and stop of this VTR.

Preparation

- Make the necessary connections as shown in the connection diagram.
- Set the Detail Switch (Noise Filter/Detail Selector) on both the VHS/VHS-C Movie and on this VTR to "ON" (or "DETAIL OFF").

❶ Put the VTR in the recording pause mode.

❷ Put the VHS/VHS-C Movie in the still playback mode.
- Put the Movie at the point where you want to start editing into the still playback mode.

❸ Press the Pause/Still Button (PAUSE/ARRET) on the VTR.
- The VHS/VHS-C Movie changes over to the playback mode and the dubbing will start automatically.

To Leave Out Unwanted Scenes

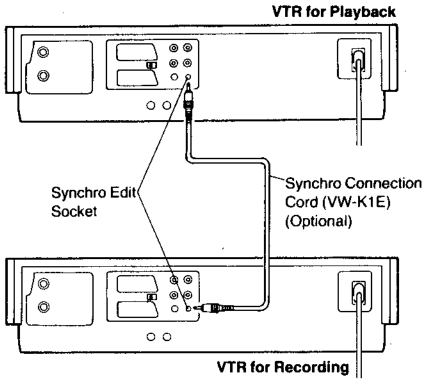
① Press the Pause/Still Button (PAUSE/ARRET) on the VTR.
- The VTR changes over to the recording pause mode and the VHS/VHS-C Movie changes over to the still playback mode.

② Operate the VHS/VHS-C Movie to skip the unwanted scenes and then put it in the still playback mode again.

③ Press the Pause/Still Button on the VTR.
- The dubbing will restart.

To stop the dubbing, press the Stop Button on the VTR and then put the VHS/VHS-C Movie in the stop mode.

Control Dubbing


VTR for Playback
Synchro Edit Socket
Synchro Connection Cord (VW-K1E) (Optional)
VTR for Recording

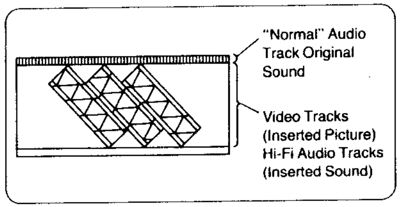
When an NV-FS100 is used as both recording and playback VTR, the connection shown above makes possible dubbing of index signals and address signals, too.
The operation is the same as for ordinary dubbing.

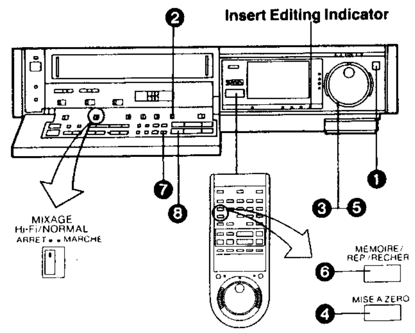
1-19. INSERT EDITING

INSERT EDITING

When this type of editing is done, the picture and the sound are recorded on the tape as shown below. However, if no new sound is input, the original sound remains only on the "normal" audio track of the tape because the original Hi-Fi sound will always be erased during insert editing.

Video and Audio Track Recording Pattern


"Normal" Audio Track Original Sound
Video Tracks (Inserted Picture) Hi-Fi Audio Tracks (Inserted Sound)


❷
Insert Editing Indicator
❶
❸-❺
❼
❽
MIXAGE
Hi-Fi/NORMAL
ARRET • • MARCHE
MEMOIRE/ REP./RECHER
❻
MISE A ZERO
❹

Preparation

- Insert a video cassette with the erasure prevention tab intact.
- When performing insert editing from another VTR, set the Noise Filter/Detail Selector to "HQ MARCHE".
- Set the Input Signal Selector according to the type of insert editing to be performed.

"ANT": When inserting scenes from a TV programme.

"S-VIDEO": When inserting picture and sound from equipment connected to the S-Video Input Socket and the Audio Input Sockets on the rear of this VTR.

❶ Press the Jog/Shuttle Button.

❷ Set the S-VHS Selector according to the S-VHS Indicator.
When the S-VHS indicator is
lit .... Set to "MARCHE"
not lit .... Set to "ARRET"

❸ Use the Shuttle Ring and the Jog Dial to search for the point where you want the editing to end (end point), and put the VTR into the still playback mode.

❹ Press the Reset Button on the Remote Controller to reset the Tape Counter to "0:00.00".

❺ Use the Shuttle Ring and the Jog Dial to search for the point where you want the editing to start (start point), and put the VTR into the still playback mode.

❻ Press the Memory/Repeat/Search Button (MEMOIRE/REP./RECHER.) on the Remote Controller so that the Memory Indicator "M" mark will light up.

❼ Press the Insert Editing Button.
(The Insert Editing Indicator lights up.)

❽ After the picture to be inserted is prepared, press the Pause/Still Button (❚❚).
(The insert editing will start.)
- The insert editing will end at the point where the Tape Counter indicates "0:00.00", and the editing VTR will stop in the still playback mode.

- It is not necessary to operate the Tape Speed Selector.
- The picture quality of an inserted part is always somewhat inferior to that of the original.
- Avoid performing insert editing repeatedly on the same part of the tape because the picture quality of that part becomes inferior.
- Do not press the Memory/Repeat/Search Button (MEMOIRE/REP./RECHER.) during insert editing. If it is pressed, the Memory Indication "M" will disappear, and the insert editiing will not end automatically at the preset editing end point.
- The inserted picture may contain slight colour noise or the colours may be unstable.

Playback of a Tape on Which Insert Editing Was Performed

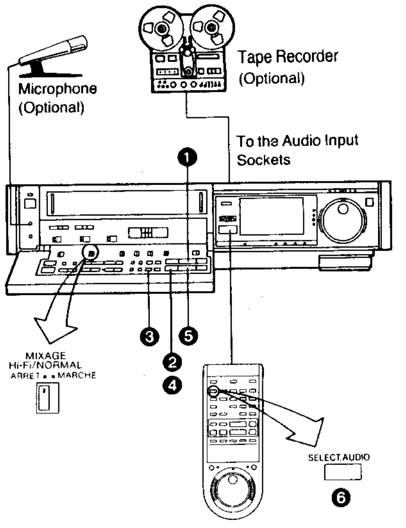
The sound inserted during insert editing is recorded on the Hi-Fi sound tracks (STEREO, GAUCHE, DROIT). If the normal sound track is selected, the original sound before the insert editing will be heard. Select the desired sound with the Audio Output Mode Selector on the Remote Controller.

Hi-FI/Normal Mix Switch
Set this switch to **"MARCHE"**, you want both the "Hi-Fi" sound and the "normal" sound to be played back mixed together.
- The mixed sound may not be very clear.
Always set this switch to **"ARRET"**, except when playing back a tape on which the insert editing or audio dubbing was performed.

1-20. AUDIO DUBBING

AUDIO DUBBING

Note that the original sound on the "normal" (mono) sound track will be completely erased during audio dubbing.



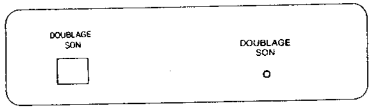
Preparation

- Set the Input Signal Source Selector (SELECTEUR D'ENTREE) to "S-VIDEO".
- Insert a video cassette with the erasure prevention tab intact.
  When a video cassette is already inside the VTR, press the VTR On/Off Switch (VIDEO) to turn it on.
- Turn the TV set on and select the video playback channel.
- Select the "normal" (mono) sound track by repeatedly pressing the Audio Output Mode Selector on the Remote Controller until the Audio Output Mode Indicators "Gauche" and "Droit" are no longer lit.

❶ Press the Play/×2 Button (▶) (LECTURE/×2) to locate the point where you want to start the audio dubbing.

❷ Press the Pause/Still Button (❚❚) (PAUSE/ARRET) at the exact point where you want to start the audio dubbing.

❸ Press the Audio Dubbing (DOUBLAGE SON) Button (the indicator will light up).



❹ Press the Pause/Still Button (❚❚) once again to release the tape from pause, and at the same time start the operation of the audio source. The audio dubbing will start.

❺ Press the Stop Button (■) to stop the audio dubbing.

- When a microphone is used for dubbing, do not place it near the speaker of your TV to prevent howling noise (acoustic feedback).
- If the erasure prevention tab of the cassette is missing, no audio dubbing can be made.

Playback of a Tape on Which Audio Dubbing Was Performed

The sound inserted during audio dubbing is recorded on the normal sound track. If the Hi-Fi sound tracks (STEREO, GAUCHE, DROIT) are selected, the original sound (before the audio dubbing) will be heard.

Hi-Fi/Normal Mix Switch

Set this switch to **"MARCHE"**, you want both the "Hi-Fi" sound and the "normal" sound to be played back mixed together.

- The mixed sound may not be very clear.
  Always set this switch to **"ARRET"**, except when playing back a tape on which the insert editing or audio dubbing was performed.

SECTION 2
ADJUSTMENT PROCEDURES

2-1. DISASSEMBLY METHOD

2-1-1. DISASSEMBLY FLOW CHART

This flowchart indicates disassembly steps of the cabinet parts and the circuit boards in order to find the necessary items for servicing.

When reassembling, perform the steps in the reverse order.

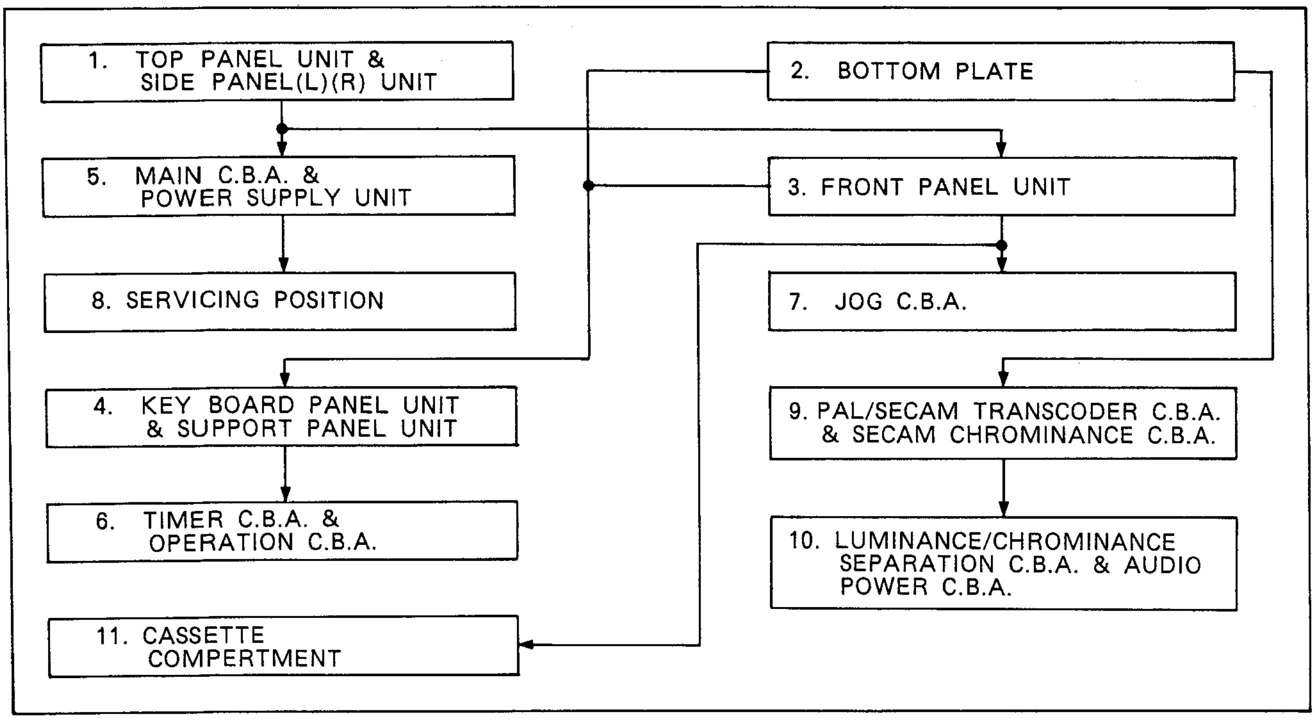

1. TOP PANEL UNIT &
SIDE PANEL(L)(R) UNIT
2. BOTTOM PLATE
5. MAIN C.B.A. &
POWER SUPPLY UNIT
3. FRONT PANEL UNIT
8. SERVICING POSITION
7. JOG C.B.A.
4. KEY BOARD PANEL UNIT
& SUPPORT PANEL UNIT
9. PAL/SECAM TRANSCODER C.B.A.
& SECAM CHROMINANCE C.B.A.
6. TIMER C.B.A. &
OPERATION C.B.A.
10. LUMINANCE/CHROMINANCE
SEPARATION C.B.A. & AUDIO
POWER C.B.A.
11. CASSETTE
COMPERTMENT

Fig. D1

2-1-2. DETAIL OF DISASSEMBLE METHOD

1. REMOVAL OF THE TOP PANEL UNIT & SIDE PANEL (L),(R) UNIT

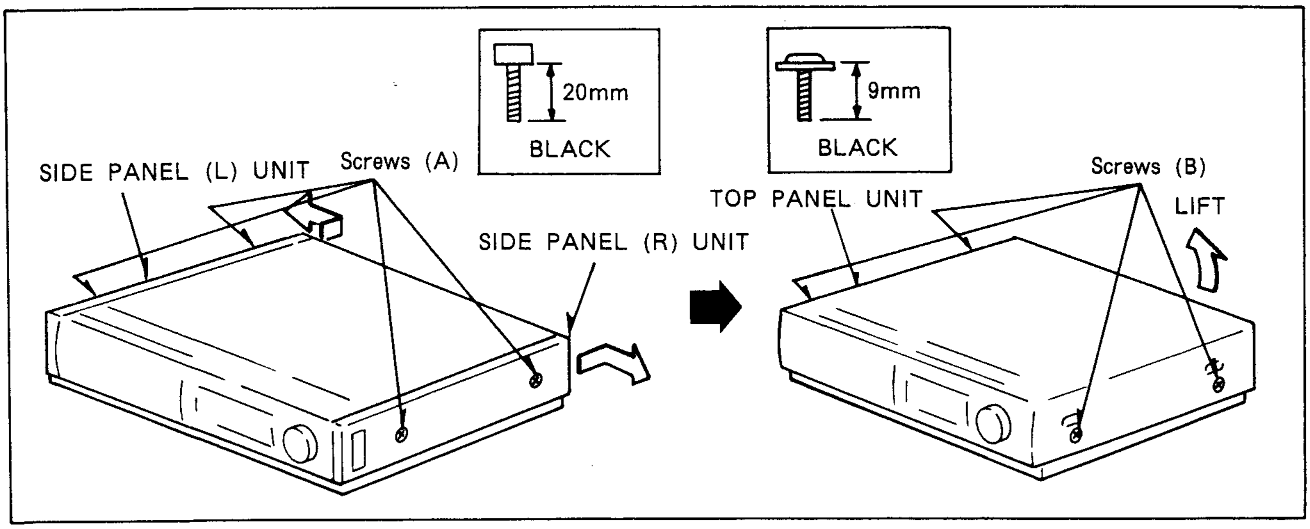

20mm
BLACK
9mm
BLACK
SIDE PANEL (L) UNIT
Screws (A)
SIDE PANEL (R) UNIT
TOP PANEL UNIT
Screws (B)
LIFT

Fig. D2

Remove ... 4 Screws (A)
Remove ... 4 Screws (B)

2. REMOVAL OF THE BOTTOM PLATE

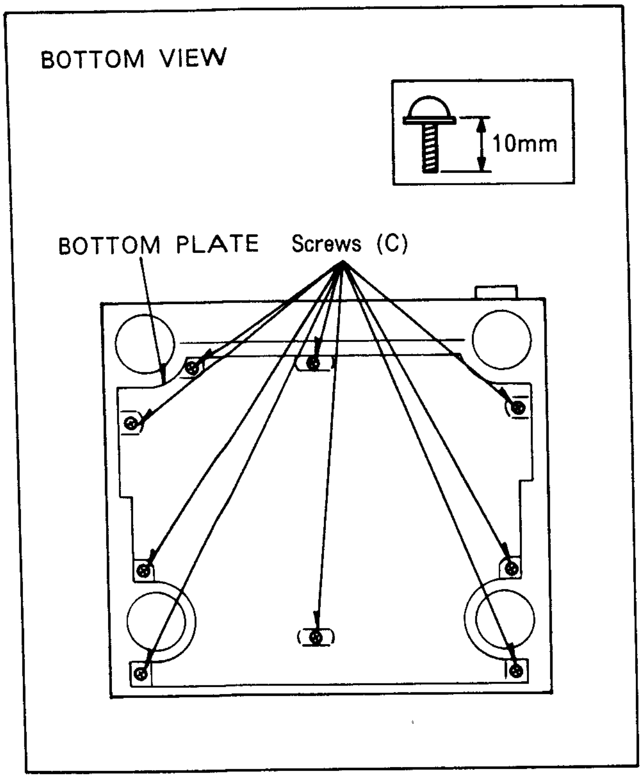

BOTTOM VIEW
10mm
BOTTOM PLATE
Screws (C)

Fig.D3

Remove ... 9 Screws (C)

3. REMOVAL OF THE FRONT PANEL UNIT

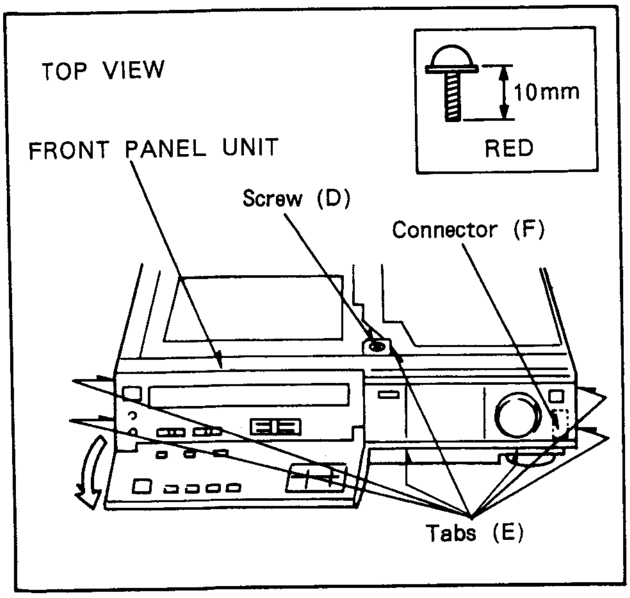

TOP VIEW
10mm
RED
FRONT PANEL UNIT
Screw (D)
Connector (F)
Tabs (E)

Fig. D4

Remove ... **Screw (D)**
Unlock ... 7 Tabs (E)
Disconnect ... Connector (F)

4. REMOVAL OF THE KEY BOARD PANEL UNIT AND SUPPORT PANEL UNIT

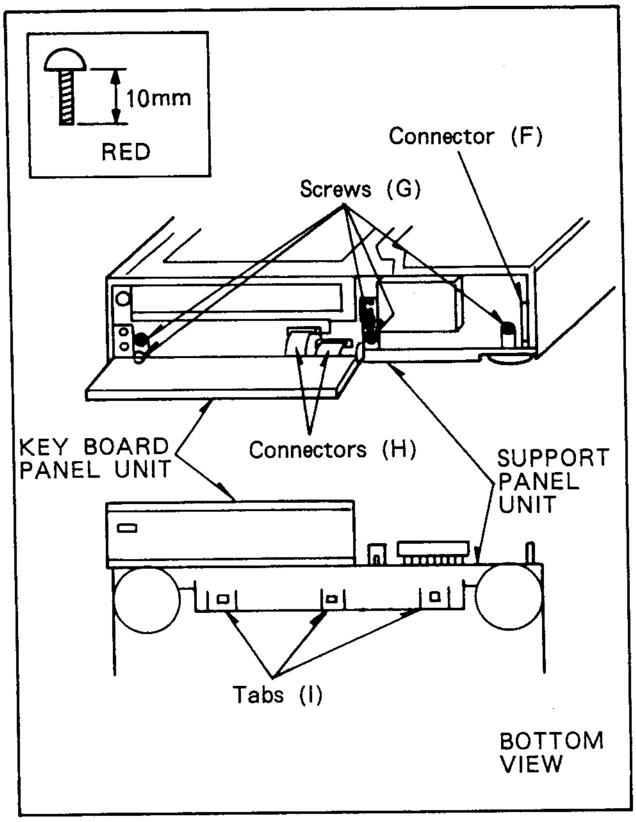
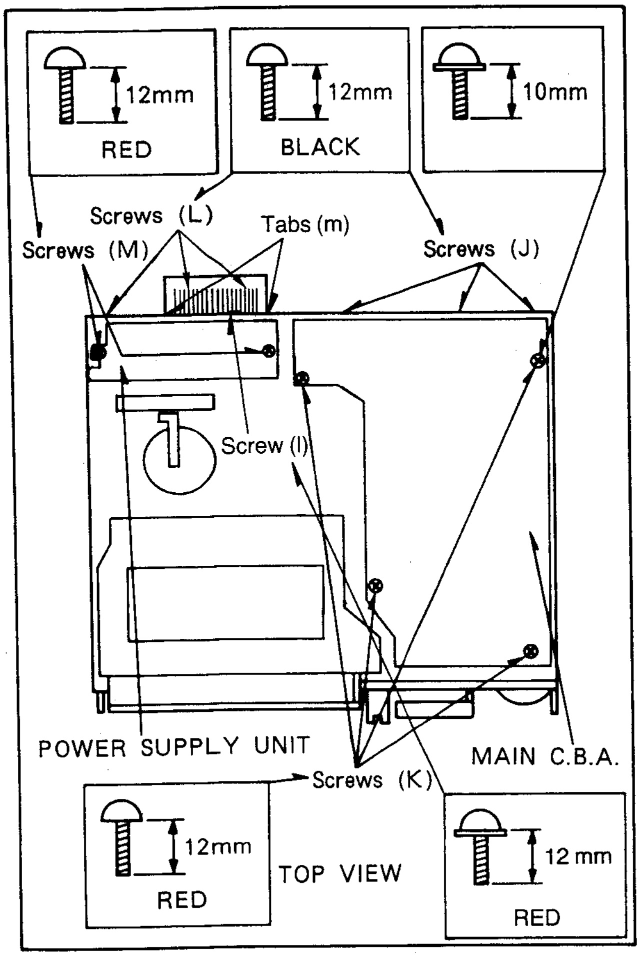

10mm
RED
Connector (F)
Screws (G)
KEY BOARD PANEL UNIT
Connectors (H)
SUPPORT PANEL UNIT
Tabs (I)
BOTTOM VIEW

Fig. D5

Remove ... 5 Screws (G)
Disconnect ... 2 Connectors (H)
Unlock ... 3 Tabs (I)

5. REMOVAL OF THE MAIN C.B.A. AND POWER SUPPLY UNIT



12mm
RED
12mm
BLACK
10mm
Screws (L)
Tabs (m)
Screws (M)
Screws (J)
Screw (l)
POWER SUPPLY UNIT
MAIN C.B.A.
Screws (K)
12mm
RED
TOP VIEW
12 mm
RED

Fig. D6

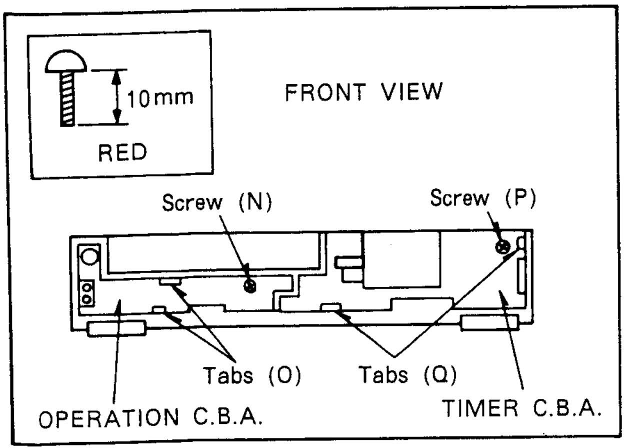
REMOVAL OF THE MAIN C.B.A.

Remove ... 3 Screws (J), 4 Screws (K)

REMOVAL OF THE POWER SUPPLY UNIT

Remove ... 3 Screws (L), 2 Screws (M)
Unlock ... 2 Tabs (m)
Remove ... Screw (l)

6. REMOVAL OF THE OPERATION C.B.A. and TIMER C.B.A.



10mm
RED
FRONT VIEW
Screw (N)
Screw (P)
Tabs (O)
Tabs (Q)
OPERATION C.B.A.
TIMER C.B.A.

Fig. D7

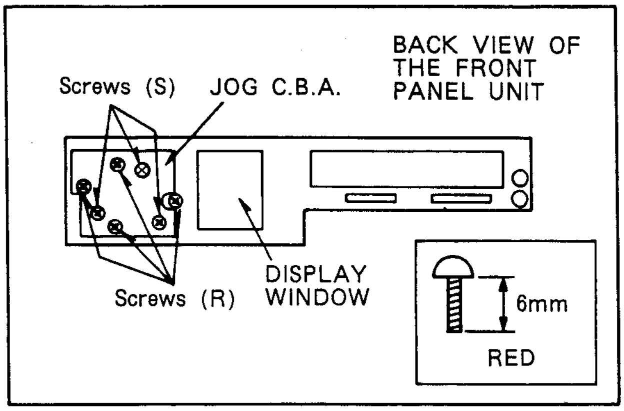
REMOVAL OF THE OPERATION C.B.A.

Remove ... Screw (N)
Unlock ... 2 Tabs (O)

REMOVAL OF THE TIMER C.B.A.

Remove ... Screw (P)
Unlock ... 2 Tabs (Q)

7. REMOVAL OF THE JOG C.B.A.

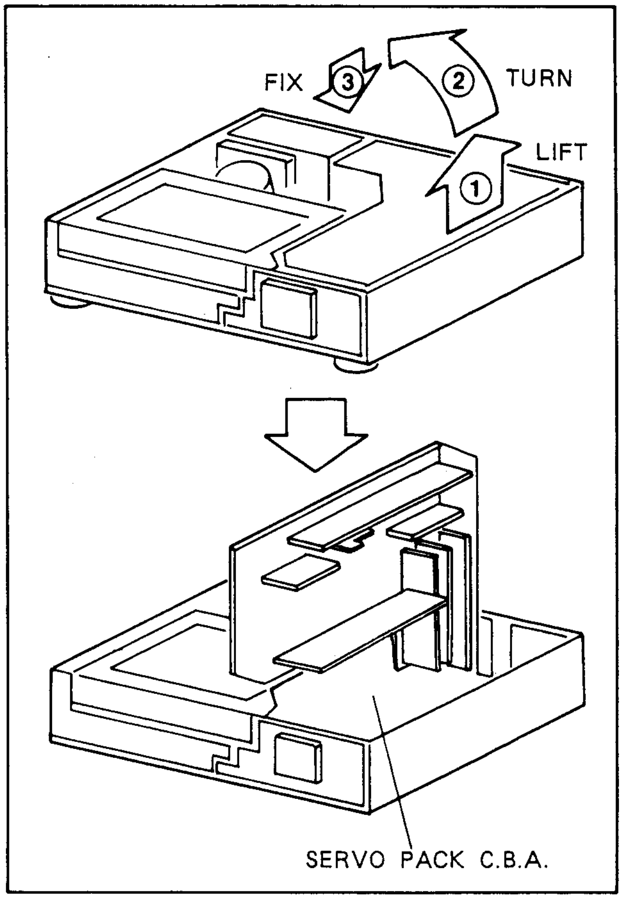


BACK VIEW OF THE FRONT PANEL UNIT
Screws (S)
JOG C.B.A.
DISPLAY WINDOW
Screws (R)
6mm
RED

Fig. D8

Remove ... 4 Screws (R)
(3 screws (S) ... For the JOG DIAL)
Remove ... JOG & SHUTTLE KNOB

8. SERVICING



FIX
③
②
TURN
LIFT
①
SERVO PACK C.B.A.

Fig. D9

9. REMOVAL OF THE PAL/SECAM TRANSCODER C.B.A. & SECAM CHROMINANCE C.B.A.

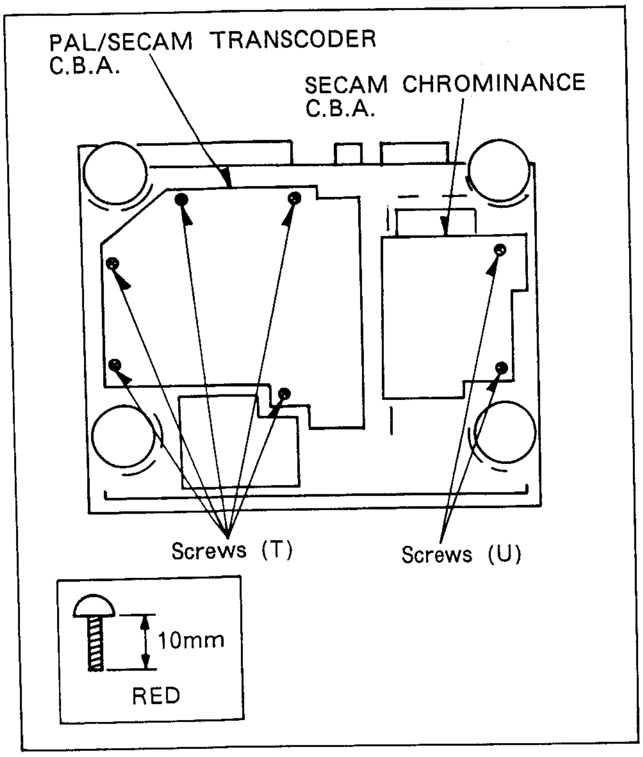

PAL/SECAM TRANSCODER C.B.A.
SECAM CHROMINANCE C.B.A.
Screws (T)
Screws (U)
10mm
RED

Fig. D10

REMOVAL OF PAL/SECAM TRANSCODER C.B.A.

Remove ... 5 Screws (T)

REMOVAL OF SECAM CHROMINANCE C.B.A.

Remove ... 2 Screws (U)

10. REMOVAL OF THE LUMINANCE/CHROMINANCE SEPARATION C.B.A. & AUDIO POWER C.B.A.

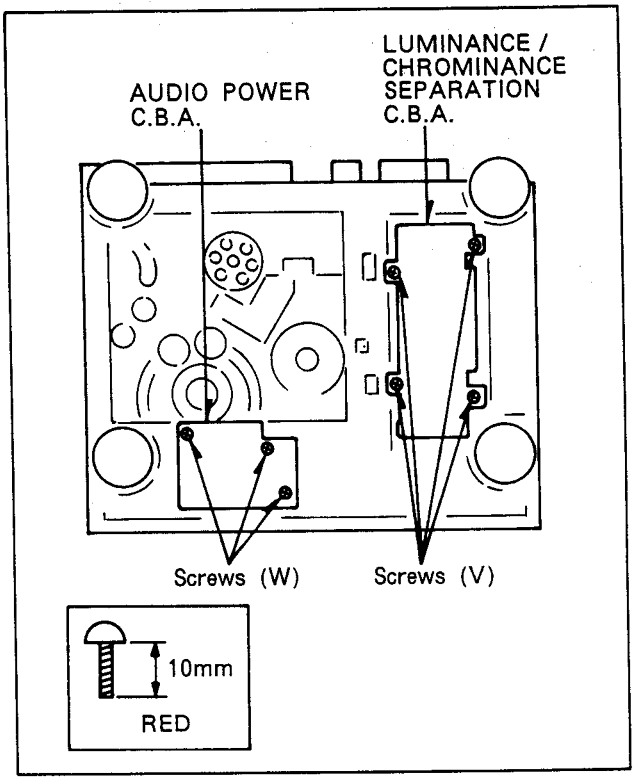

LUMINANCE / CHROMINANCE SEPARATION C.B.A.
AUDIO POWER C.B.A.
Screws (W)
Screws (V)
10mm
RED

Fig. D11

REMOVAL OF LUMINANCE / CHROMINANCE SEPARATION C.B.A.

Removal ... 4 Screws (V)

REMOVAL OF AUDIO POWER C.B.A.

Removal ... 3 Screws (W)

11. REMOVAL OF THE CASSETTE COMPERTMENT

Remove 2 screws (X) and slide the cassette holder until appearing 2 screws (Y) by turning (clockwise) the capstan rotor unit (located in the bottom side) and then remove 2 screws (Y). Remove the flexible wire from connector P1503 mounted on Take-up photo Tr. C.B.A., then carefully pull out the cassette compartment.

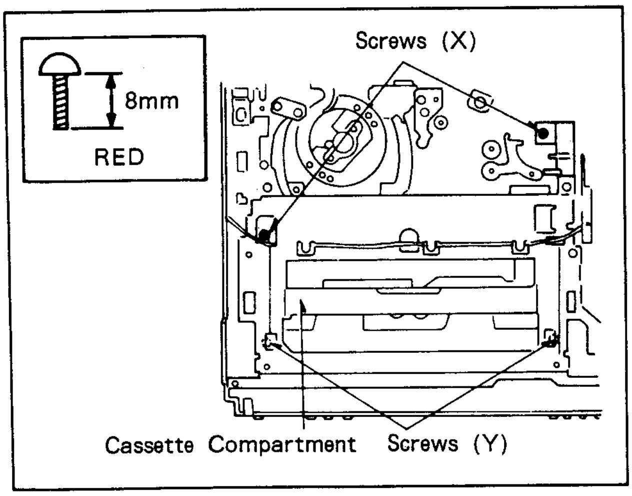

8mm
RED
Screws (X)
Cassette Compartment
Screws (Y)

Fig. D12

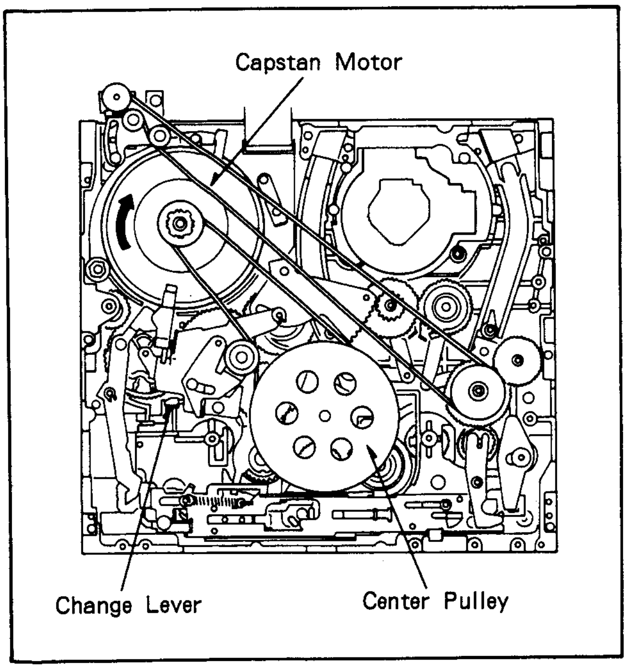

Capstan Motor
Change Lever
Center Pulley

Fig. D13

2-2. MECHANICAL ADJUSTMENT PROCEDURES

This Mechanical chassis is the same as G-II Mechanical chassis.
Therefore please refer to the service manual "G-II / G-REV" (Order No. VRD8901M101).

2-3. ELECTRICAL ADJUSTMENT PROCEDURES

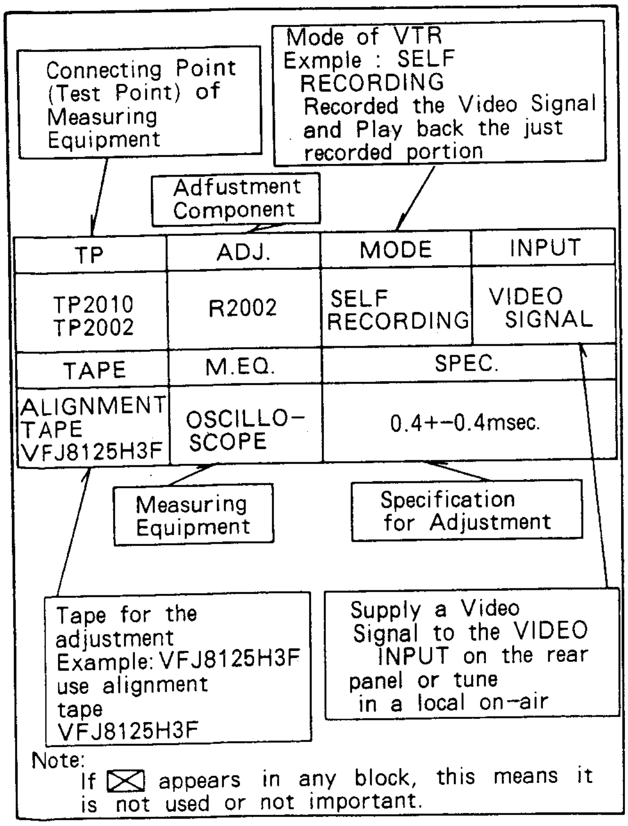
This section provides complete electrical adjustment procedures which may be required for electronic circuits of S-VHS Video Cassette Recorders NV-FS100HF.

2-3-1. TEST EQUIPMENTS

To perform the electrical adjustments completely, following equipments are required.

1. VTVM (Vacuum Tube Volt Meter) or DVM (Digital Volt Meter)
   Voltage Range : 0.001 ~ 50V
2. Dual-Trace Oscilloscope
   Voltage range : 0.005 ~ 50V/div.
   Frequency Range : DC-30MHz
   Probes : 10:1
3. Frequency counter
   Frequency Range : 0 ~ 10MHz
4. Signal Generator (Sinewave)
   Frequency Range : 0 ~ 500KHz
5. Video Sweep Generator
   Frequency Range : 0 ~ 10MHz
6. Universal counter
7. Colour Monitor TV
8. Plaastic Tip Driver
9. VHS Alignment Tape (VFJ8125H3F)
10. Pattern Generator
11. VHS Blank Tape
12. S-VHS Blank Tape

2-3-2. HOW TO READ THE ADJUSTMENT PROCEDURES


Connecting Point (Test Point) of Measuring Equipment
Mode of VTR
Exmple : SELF RECORDING
Recorded the Video Signal and Play back the just recorded portion
Adfustment Component
TP
ADJ.
MODE
INPUT
TP2010
TP2002
R2002
SELF RECORDING
VIDEO SIGNAL
TAPE
M.EQ.
SPEC.
ALIGNMENT TAPE VFJ8125H3F
OSCILLO-SCOPE
0.4+-0.4msec.
Measuring Equipment
Specification for Adjustment
Tape for the adjustment
Example: VFJ8125H3F use alignment tape VFJ8125H3F
Supply a Video Signal to the VIDEO INPUT on the rear panel or tune in a local on-air

Note:
If ☒ appears in any block, this means it is not used or not important.

Fig. E1

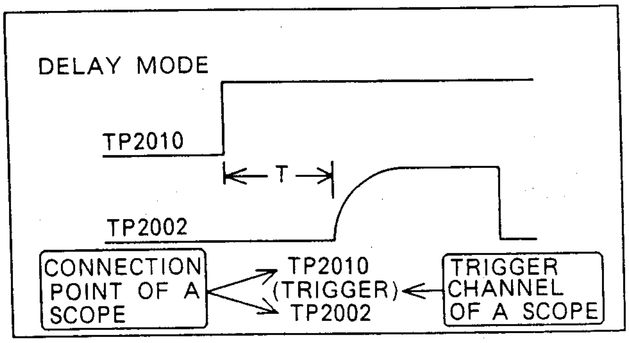

DELAY MODE
TP2010
T
TP2002
CONNECTION POINT OF A SCOPE
TP2010
(TRIGGER)
TP2002
TRIGGER CHANNEL OF A SCOPE

Fig. E2

Note:
Befor the electrical adjustment, set the VTR as following conditions except for especial instructions in each adjustment item.

1. Picture sharpness VR ... Centre FIX position
2. S-VHS Selector ... ON position
3. Tape Speed ... SP position
4. Audio Rec Control VR ... Centre FIX position
5. Hi-Fi/Normal Mix Switch ... OFF position
6. Input Signal Source Selector ... AV position
7. AV Format/Test Signal Switch ... AV Format Position
8. Noise Filter/Detail Selector ...HQ position
9. Digital Tracking Switch ... ON position.
10. Simul Switch ... OFF position
11. Euro AV output select Switch ... Normal position
12. Channel on display ... AV position
13. Rec System Switch ... AUTO position
14. Output Signal Selector ... AUTO position
15. Input Signal SeLector ... AUTO position

SERVO Section

2-3-3. PG SHIFTER ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP2001 TP3002	VR2001	PLAY	☒
TAPE	**M. EQ.**	**SPEC.**	
ALIGNMENT TAPE VFJ8125H3F	OSCILLO-SCOPE	7.0+-0.5H	

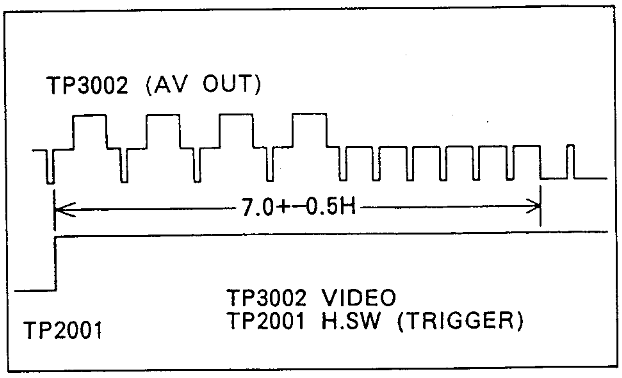

TP3002 (AV OUT)
7.0+-0.5H
TP2001
TP3002 VIDEO
TP2001 H.SW (TRIGGER)

Fig. E3

2-3-4. SLOW FREE RUN ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP2015	VR2013	STILL	COLOUR BAR (AV IN)
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	FREQUENCY COUNTER	453+-15(Hz)	

1. Record the Colour Bar in SP Mode and Playback the just recorded portion. Then place the unit in STILL Mode.
2. Make a test mode as shown in Fig. Test mode. Connect a cut Jumper wire.
3. Connect the jumper wire between TP2026 and GND.
4. Adjust VR2013 so that reading of the Frequency Counter is 453+-15(Hz).

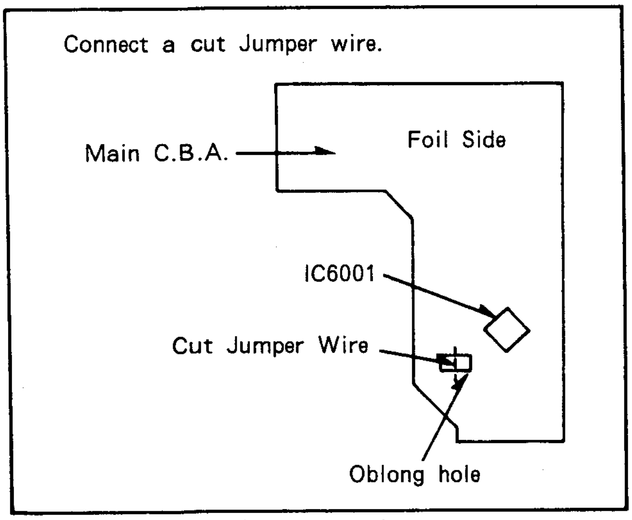


Fig. Test mode

2-3-5. VIDEO AUTO TRACKING GAIN ADJUSTMENT

TP	ADJ.	MODE	INPUT
HQ PACK PIN-15	VR5003	STOP	(4MHz SINEWAVE 200mVp-p) (TO TP3001)
TAPE	**M. EQ.**	**SPEC.**	
	SIGNAL GEN/ D.V.M.	3.1+ -0.1(Vp-p)	

1. Remove the connector P501.
2. Connect the Sinewave Signal Generator to TP3001 through capacitor(0.1uF) and set the Sinewave Signal Generator to 4MHz,200mVp-p.
3. Connect the D.V.M. (Digital Volt Meter) to HQ PACK Pin-15.
4. Adjust VR5003 so that reading of D.V.M. is 3.1+-0.1(Vp-p).

2-3-6. ARTIFICIAL V-SYNC ADJUSTMENT

TP	ADJ.	MODE	INPUT
MONITOR SCREEN	VR2010 (SP) VR2009 (LP)	STILL	COLOUR BAR (AV IN)
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	TV MONITOR	NO V-DANCING	

1. Record the Video Signal in SP Mode and playback the just recorded portion. Then place the unit in STILL Mode.
2. Adjust VR2010 so that the V-Dancing does not appear on the Monitor Screen.
3. Record the Video Signal in LP Mode and playback the just recorded portion. Then place the unit in STILL Mode.
4. Adjust VR2009 so that the V-Dancing does not appear on the Monitor Screen.

2-3-7. SLOW TRACKING ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP2002 TP2026	VR2011 (SP) VR2006 (LP)	SLOW	COLOUR BAR (AV IN)
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	OSCILLO-SCOPE	17.5+-2 (msec) (SP) 12+-2 (msec) (LP)	

1. Connect the Oscilloscope to TP2002 and TP2026.
2. Record the Colour Bar in SP Mode and playback the just recorded portion. Then place the Unit in 1/5 Speed Slow by Shuttle Dial(+30degree) as shown in Fig. Jog/Shuttle Dial.

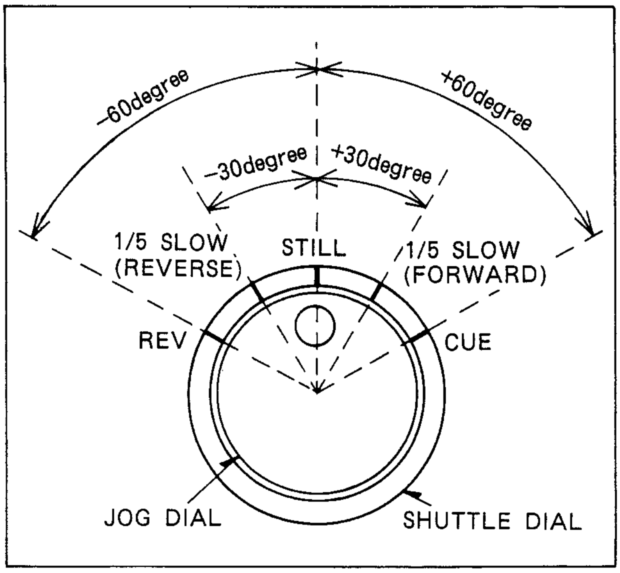


Fig. Jog/Shuttle Dial

3. Adjust VR2011 so that the phase difference becomes 17.5+–2 (msec) as shown in Fig. E4.
4. Record the Colour Bar in LP Mode and playback the just recorded portion. Then place the Unit in 1/5 Speed Slow by Shuttle Dial(+30degree) as shown in Fig. Jog/Shuttle Dial.
5. Adjust VR2006 so that the phase difference becomes 12+–2 (msec) as shown in Fig. E4.

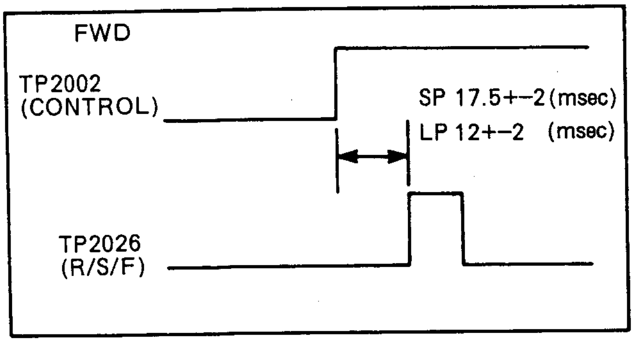


Fig. E4

2-3-8. REVERSE SLOW TRACKING ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP2002 TP2026	VR2019 (SP) VR2018 (LP)	REVERSE SLOW	COLOUR BAR (AV IN)

TAPE	M. EQ.	SPEC.
BLANK TAPE	OSCILLO-SCOPE	14+–2 (msec) (SP) 7+–2 (msec) (LP)

1. Connect the Oscilloscope to TP2002 and TP2026.
2. Record the Colour Bar in SP Mode and playback the just recorded portion. Then place the Unit in 1/5 Reverse Slow Mode by Shuttle Dial(–30degree) as shown in Fig. Jog/Shuttle Dial.
3. Adjust VR2019 so that the phase differnce becomes 14+–2 (msec) as shown in Fig. E5.
4. Record the Colour Bar in LP Mode and playback the just recorded portion. Then place the Unit in 1/5 Reverse Slow Mode by Shuttle Dial(–30degree) as shown in Fig. Jog/Shuttle Dial.
5. Adjust VR2018 so that the phase difference becomes 7+–2 (msec) as shown in Fig. E5.

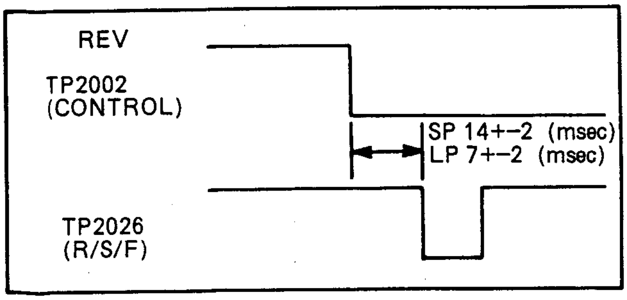


Fig. E5

LUMINANCE, CHROMINANCE & HEAD AMP Section

2-3-9. Y–NR GAIN ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP3051	VR303	STOP (LP)	COLOUR BAR (S–VIDEO IN)

TAPE	M. EQ.	SPEC.
S–VHS BLANK TAPE	OSCILLO-SCOPE	800+–20 (mVp–p) (75ohm Terminated)

1. Supply the video signal to S–Video input socket.
2. Set the input select switch to S–VIDEO position.
3. Connect the oscilloscope to TP3051 on Main C.B.A.
4. Adjust VR303 so that the Video Level becomes 800+–20 (mVp–p).

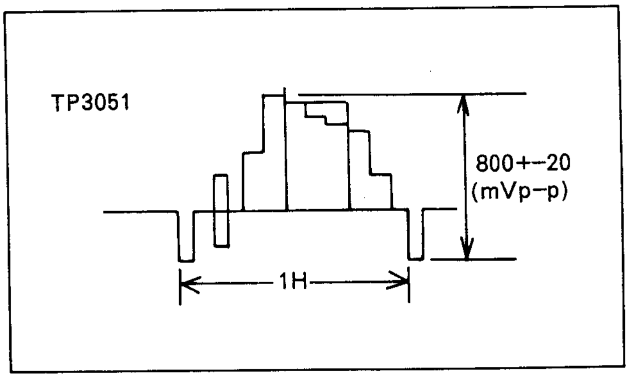


Fig. E6

Note:
This adjustment should be completed before the luminance and chrominance recording current adjustment.

2-3-10. CHROMINANCE & LUMINANCE RECORDING CURRENT ADJUSTMENT

* S–VHS CHROMINANCE RECORDING CURRENT ADJ.

TP	ADJ.	MODE	INPUT
TP507 (HOT) TP508 (GND)	VR502	RECORDING	COLOUR BAR (S–VIDEO IN)

TAPE	M. EQ.	SPEC.
S–VHS BLANK TAPE	OSCILLO-SCOPE	28+–2mVp–p

1. Suppy the video signal to S–Video input socket.
2. Set the input select switch to S–VIDEO position.

3. Connect the oscilloscope to TP507 (HOT) and TP508 (GND).
4. Before Chrominance recording current adjustment Luminance recording current must be closed to observe the chrominance signal. (VR501 is minimum position.)
5. Adjust VR502 for 28+–2mVp-p as shown below.

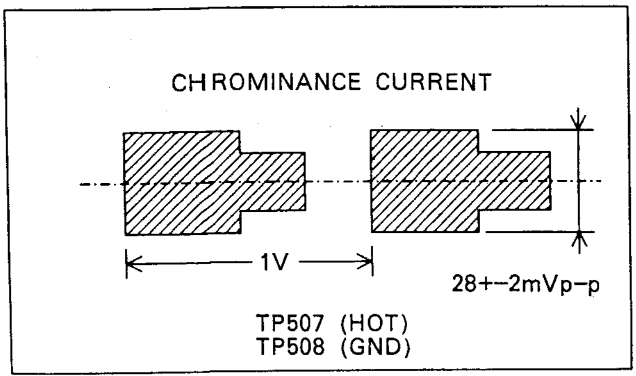


Fig. E7

* S-VHS LUMINANCE RECORDING CURRENT ADJ.

TP	ADJ.	MODE	INPUT
TP507 (HOT) TP508 (GND)	VR501	RECORDING	COLOUR BAR (S-VIDEO IN)
TAPE	**M. EQ.**	**SPEC.**	
S-VHS BLANK TAPE	OSCILLO-SCOPE	120+–5mVp-p	

6. After chrominance recording current adjustment, adjust VR501 for 120+–5mVp-p as shown below.

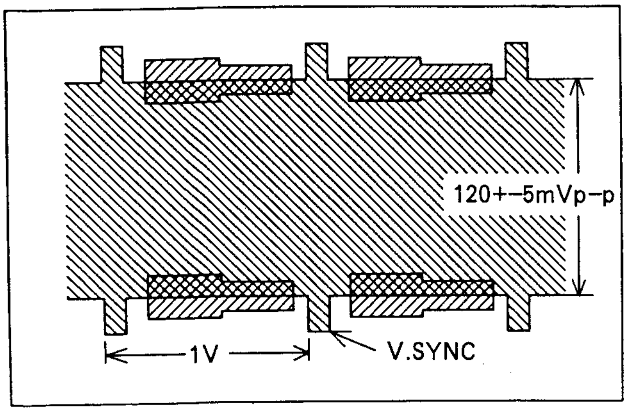


Fig. E8

* VHS LUMINANCE RECORDING CURRENT ADJ.

TP	ADJ.	MODE	INPUT
TP507 (HOT) TP508 (GND)	VR3001	RECORDING	COLOUR BAR (AV IN)
TAPE	**M. EQ.**	**SPEC.**	
VHS BLANK TAPE	OSCILLO-SCOPE	110+–5mVp-p	

1. Set the S-VHS selector to OFF position.
2. Connect the oscilloscope to TP507 (HOT) and TP508 (GND).
3. Adjust VR3001 for 110+–5mVp-p as shown in Fig. E9.

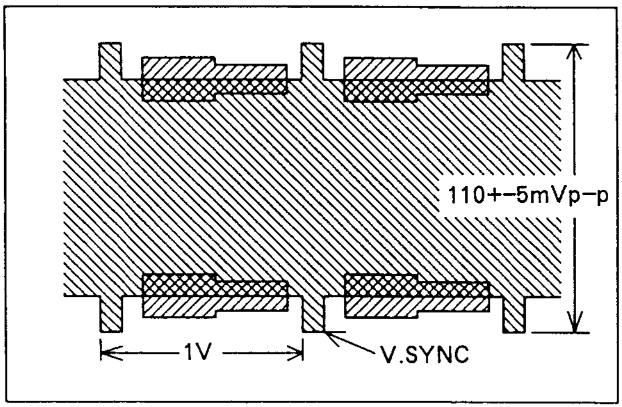


Fig. E9

This adjustment should be completed after S-VHS luminance and chrominance recording current adjustment.

2-3-11. PLAYBACK VIDEO LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
S-OUT Input/Output pack pin -38(Y) or 40(C)	VR302 (Y) VR801 (C)	SELF RECORDING	COLOUR BAR (S-VIDEO IN)
TAPE	**M. EQ.**	**SPEC.**	
S-VHS BLANK TAPE	OSCILLO-SCOPE	1.0+–0.05Vp-p (Y) 0.55+–0.05Vp-p (C)	

1. Supply the video signal to S-Video input socket.
2. Set the input select switch to S-VIDEO position.
3. Connect the oscilloscope to Input/Output pack pin-38 for luminance and to pin-40 for chrominance.
4. Play back the just recorded portion.
5. Adjust VR302 for 1.0+–0.05Vp-p and VR801 for 0.55+–0.05Vp-p as shown in Fig. E10.

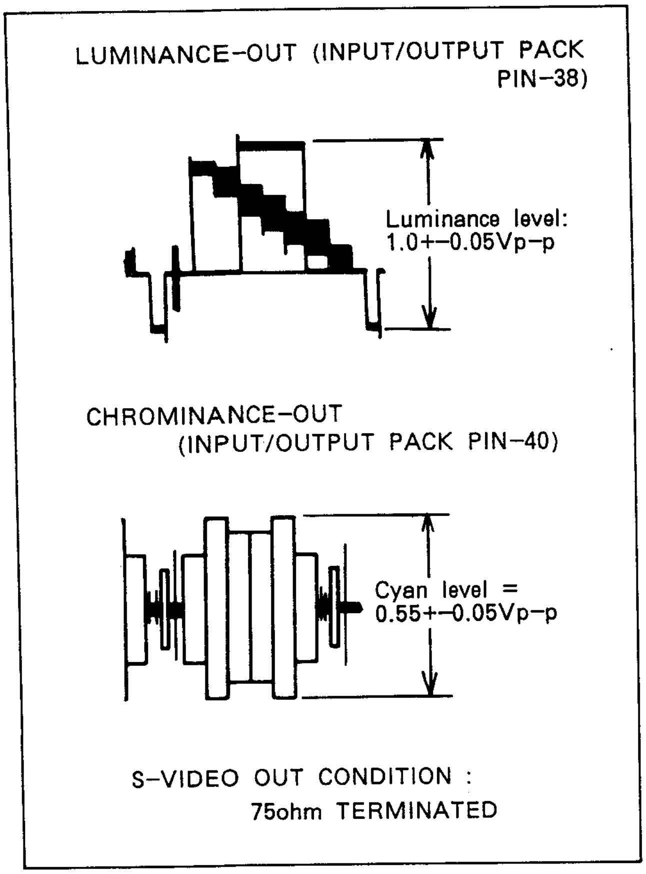

LUMINANCE-OUT (INPUT/OUTPUT PACK PIN-38)
Luminance level: 1.0+-0.05Vp-p
CHROMINANCE-OUT (INPUT/OUTPUT PACK PIN-40)
Cyan level = 0.55+-0.05Vp-p
S-VIDEO OUT CONDITION : 75ohm TERMINATED

Fig. E10

2-3-12. S-VHS COS EQ ADJUSTMENT

TP	ADJ.	MODE	INPUT
Input/Output Pack Pin-38	VR5002	SELF RECORDING	VIDEO SWEEP (S-VIDEO IN)
TAPE	**M. EQ.**	**SPEC.**	
S-VHS BLANK TAPE	OSCILLO-SCOPE	-4.5+-0.5dB (56% ~ 63%)	

1. Set the sweep generator output as shown below.

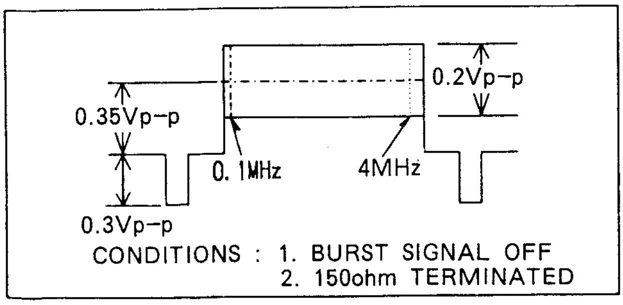

0.2Vp-p
0.35Vp-p
0.1MHz
4MHz
0.3Vp-p
CONDITIONS : 1. BURST SIGNAL OFF
2. 150ohm TERMINATED

Fig. E11

2. Supply the video sweep signal to S-Video Input socket.
3. Set the Input Signal Selector to S-VIDEO position.
4. Playback the just recorded portion.
5. Adjust VR5002 so that the level at 4MHz becomes -4.5+-0.5dB (56% ~ 63%) comparing with the level at 0.1MHz as shown in Fig. E12.

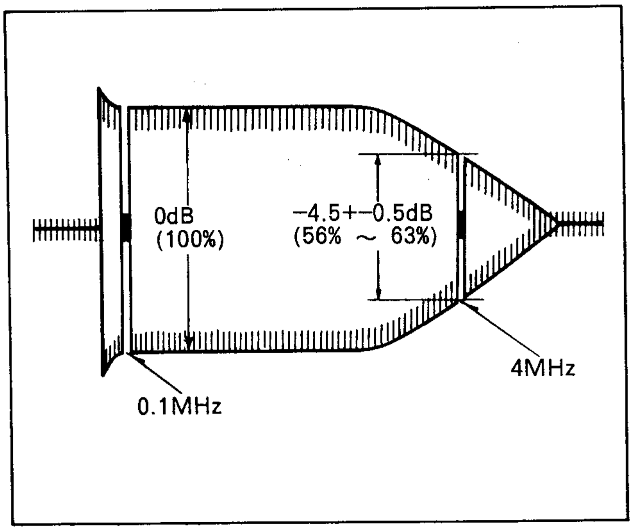

0dB
(100%)
-4.5+-0.5dB
(56% ~ 63%)
4MHz
0.1MHz

Fig. E12

2-3-13. VHS FREQUENCY RESPONSE ADJUSTMENT

TP	ADJ.	MODE	INPUT
LINE OUT (TP3002)	VR5004 (SP) VR5005 (LP)	SELF RECORDING	VIDEO SWEEP (AV IN)
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	VIDEO SWEEP/ OSCILLO-SCOPE	A=0+-1dB (90~110%): SP A=0+-1dB (90~110%): LP	

1. Set the sweep generator output as shown in Fig. E13.

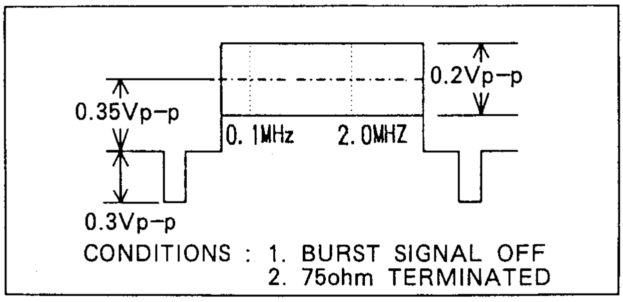

0.2Vp-p
0.35Vp-p
0.1MHz
2.0MHZ
0.3Vp-p
CONDITIONS : 1. BURST SIGNAL OFF
2. 75ohm TERMINATED

Fig. E13

2. Play back the just recorded portion.
3. Adjust volume VR5004 (SP), VR5005 (LP) resoectively so that the level at 2MHz (A) becomes within specification comparing with the level at 0.1MHz as shown in Fig. E14.

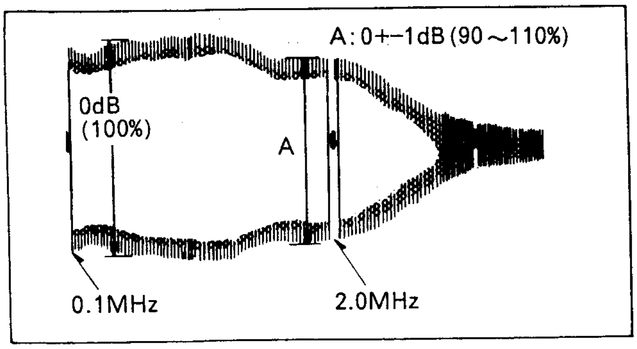

A: 0+-1dB (90~110%)
0dB
(100%)
A
0.1MHz
2.0MHz

Fig. E14

2-3-14. LUMINANCE/CHROMINANCE SEPARATION AGC OUTPUT LEVEL ADJUSTMENT

TP	**ADJ.**	**MODE**	**INPUT**
TP3704	VR3701	STOP	COLOUR BAR (AV IN)
TAPE	**M. EQ.**	**SPEC.**	
	OSCILLO-SCOPE	2.0+-0.05(Vp-p)	

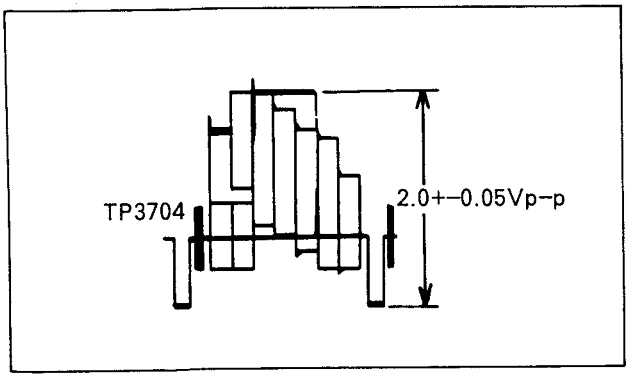

TP3704
2.0+-0.05Vp-p

Fig. E15

2-3-15. LUMINANCE/CHROMINANCE SEPARATION CCD INPUT LEVEL ADJUSTMENT

TP	**ADJ.**	**MODE**	**INPUT**
TP3703	VR3708	STOP	COLOUR BAR (AV IN)
TAPE	**M. EQ.**	**SPEC.**	
	OSCILLO-SCOPE	0.85+-0.05(Vp-p)	

1. Connect the capacitor(1000pF) between TP3703 and GND.

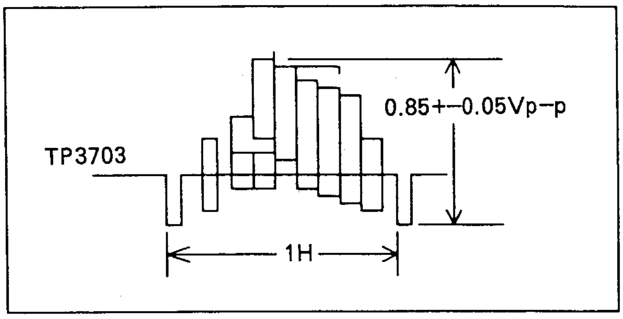

TP3703
0.85+-0.05Vp-p
1H

Fig. E16

2-3-16. LOGICAL COMB FILTER PHASE AND GAIN ADJUSTMENT

TP	**ADJ.**	**MODE**	**INPUT**
TP3701	VR3702, VR3706	STOP	MULTI BURST (AV IN)
	VR3703, VR3707		
TAPE	**M. EQ.**	**SPEC.**	
	OSCILLO-SCOPE	4.43MHz BURST SIG IS MINIMIZED	

1. Set the video sweep generator output as shown in below.

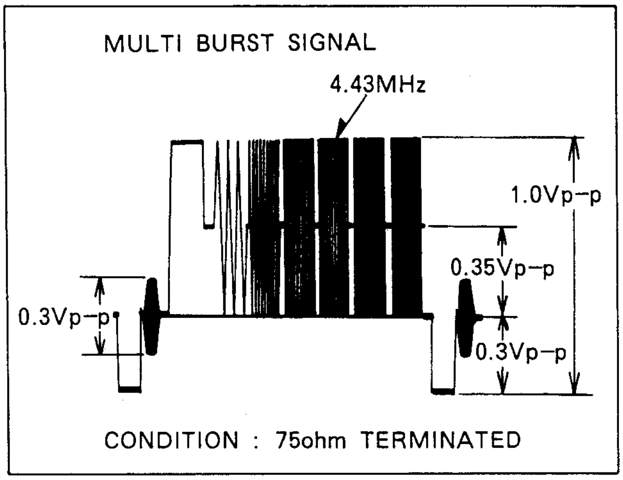

MULTI BURST SIGNAL
4.43MHz
1.0Vp-p
0.35Vp-p
0.3Vp-p
0.3Vp-p
CONDITION : 75ohm TERMINATED

Fig. E17

2. Supply the multi burst signal from video sweep to AV Input.
4. Set the Switch (SW3701) on luminance/chrominance separation C.B.A. to TEST position.
5. Adjust VR3702 and VR3706 mutually so that the 4.43MHz burst signal is minimized.
6. Set the Switch (SW3701) on luminance/chrominance separation C.B.A. to Normal position.
7. Adjust VR3703 and VR3707 mutually so that the 4.43MHz burst signal is minimized.

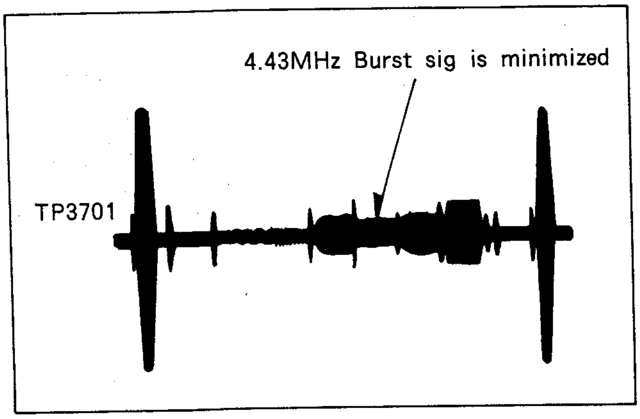


Fig. E18

2-3-17. SEPARATED LUMINANCE OUTPUT LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
P3704-1	VR3709	STOP	COLOUR BAR (AV IN)
TAPE	**M. EQ.**	**SPEC.**	
☒	OSCILLO-SCOPE	1.0+-0.05(Vp-p)	

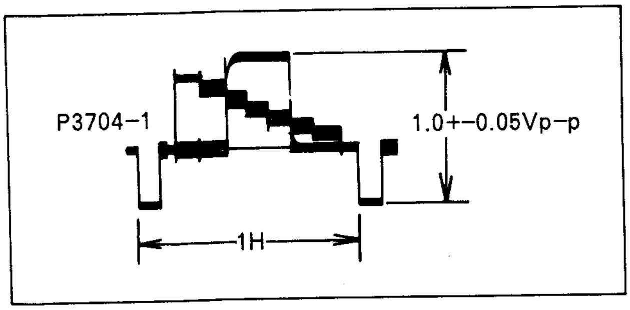


Fig. E19

2-3-18. LUMINANCE/CHROMINANCE SEPARATION ADJUSTMENT

TP	ADJ.	MODE	INPUT
P3704-1	VR3704, VR3705	STOP	COLOUR BAR (AV IN)
TAPE	**M. EQ.**	**SPEC.**	
☒	OSCILLO-SCOPE	RESIDUAL CHROMA LEVEL IS MINIMIZED	

1. Connect the oscilloscope to P3704-1.
2. Adjust VR3704 and VR3705 mutually so that the residual chroma level is minimized as shown in Fig. E20.

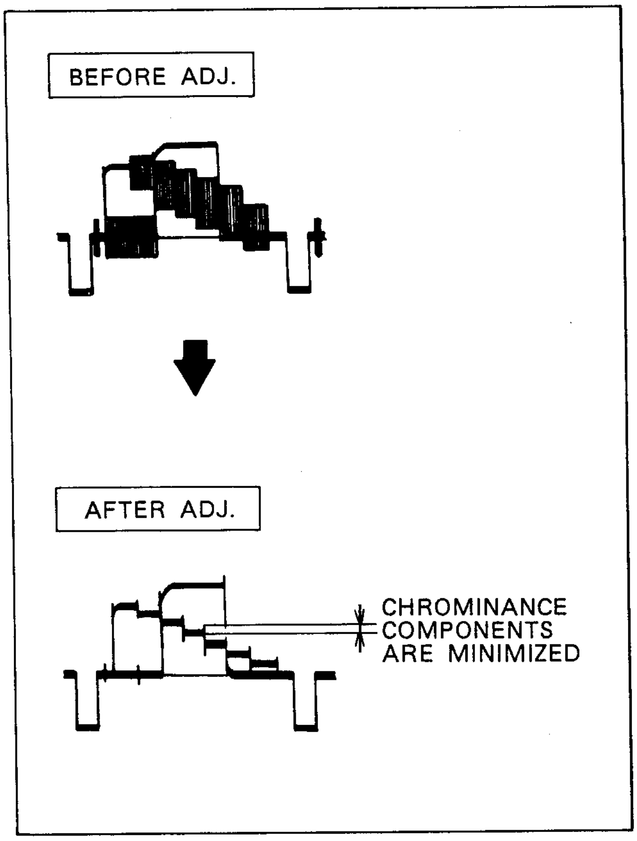


Fig. E20

2-3-19. SECAM KILLER ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC851-11	T851	SELF RECORDING	SECAM VIDEO SIGNAL (AV IN)
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	OSCILLO-SCOPE	MAXIMUM AS POSSIBLE	

1. Set the Rec Format selector to MESECAM position and record with MESECAM mode.
2. Playback the just recorded portion.
3. Adjust T851 so that the points "A" becomes maximum on the waveform.

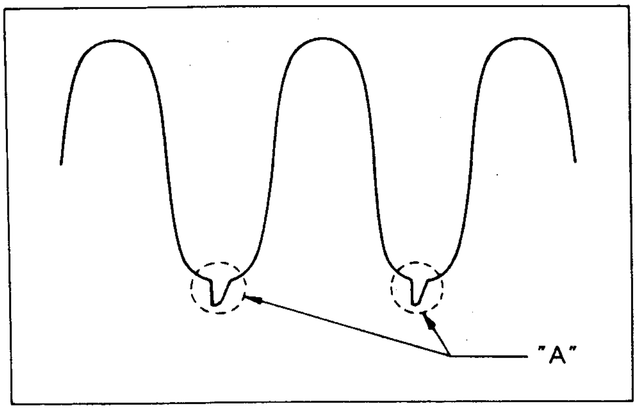


Fig. E21

2-3-20. PILOT BURST PHASE ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC801-15	C833	STOP	COLOUR BAR SIGNAL (S-VIDEO INPUT)
TAPE	**M. EQ.**	**SPEC.**	
	VECTOR-SCOPE	-95degrees+-5degree	

1. Set the Input Signal Selector to S-VIDEO position.
2. Supply the colour bar signal to the S-Video input socket on the rear panel.
3. Connect IC801-5 to GND.
4. Supply 2.5V to IC801-37.
5. Connect the Vectorscope to IC801-15 and external terminal for trigger to IC801-31.
6. Adjust C833 so that the pilot burst signal is placed in -95+-5degree against the U-Axis on Vectorscope.

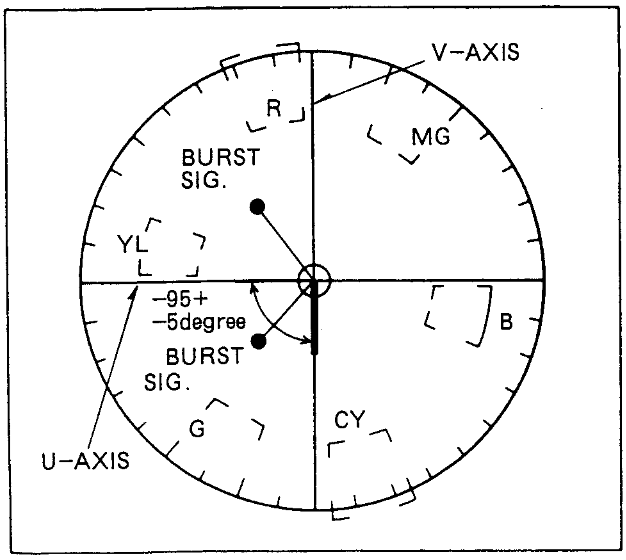


Fig. E22

2-3-21. S-VHS PLAYBACK LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC303-2	VR301	SELF RECORDING	COLOUR BAR (S-VIDEO IN)
TAPE	**M. EQ.**	**SPEC.**	
S-VHS BLANK TAPE	OSCILLO-SCOPE	400+-10(mVp-p)	

1. Supply the video signal to S-Video input socket.
2. Set the input select switch to S-VIDEO position.
3. Connect the capacitor(3900pF) between IC303-2 and GND.
4. Connect the oscilloscope to IC303-2.
5. Adjust VR301 so that the luminance level becomes 400+-10mVp-p.

2-3-22. LUMINANCE NOISE REDUCTION BALANCE ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC3301-21	VR3301	RECORDING (LP MODE)	COLOUR BAR (AV IN)
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	OSCILLO-SCOPE	WAVEFORM IS MINIMIZED	

1. Record the Colour Bar in LP Mode.
2. Connect the capacitor(1000pF) between IC3301-21 and GND.
3. Connect the Oscilloscope to IC3301-21.
4. Adjust VR3301 so that waveform becomes minimum.

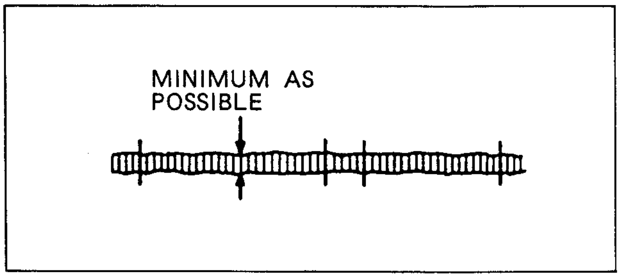


Fig. E23

2-3-23. LUMINANCE NOISE REDUCTION GAIN ADJUSTMENT

TP	ADJ.	MODE	INPUT
P3301-1 and 4	VR3302	STOP (LP)	COLOUR BAR (AV IN)
TAPE	**M. EQ.**	**SPEC.**	
	OSCILLO-SCOPE	A Level = B Level	

1. Set the S-VHS Selector to OFF position.
2. Supply the colour bar signal to AV Input.
3. Connect the oscilloscope to P3301-1 (CH-A) and P3301-4 (CH-B).
4. Adjust VR3302 so that the luminance level between "A" and "B" are the same level.

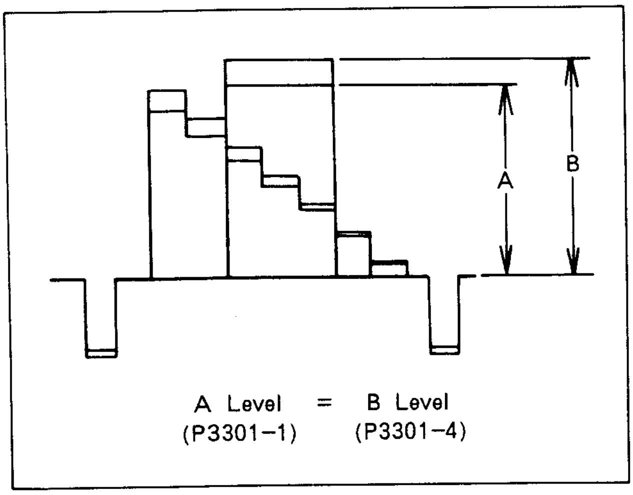


Fig. E24

2-3-24. CHROMINANCE RECURSIVE FILTER ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC3301-7	VR8301 VR8302	SELF RECORDING	COLOUR BAR (AV IN)
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	OSCILLO-SCOPE	WAVEFORM IS MINIMIZED	

1. Supply the colour bar signal to AV input socket.
2. Play back the just recorded portion.
3. Connect the oscilloscope to IC3301-7.
4. Adjust VR8301 and VR8302 mutually so that the waveform is minimized.

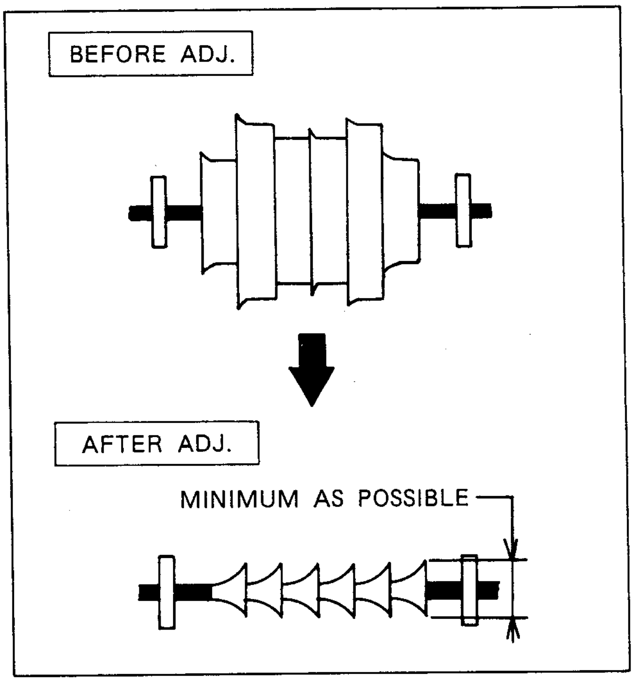


Fig. E25

Note:
This adjust should be completed after all adjustment of recording mode.

2-3-25. SUPER LIMITER ADJUSTMENT

TP	ADJ.	MODE	INPUT
HQ PACK PIN-20	VR5001	SELF RECORDING	SINEWAVE (7MHz, 200mVp-p)
TAPE	**M. EQ.**	**SPEC.**	
S-VHS BLANK TAPE	SIGNAL GENER-ATOR/ OSCILL-OSCOPE	150+-10mVp-p	

1. Connect the Signal Generator to TP5001 on the HQ PACK and set the Signal Generator to 7MHz,200mVp-p.
2. Set the input select switch to S-VIDEO position.
3. Supply 5V to Q5005-B.
4. Connect the Oscilloscope to pin20 of HQ PACK.
5. Play back the just recorded portion.
6. Adjust VR5001 so that the waveform level becomes 150+-10mVp-p.

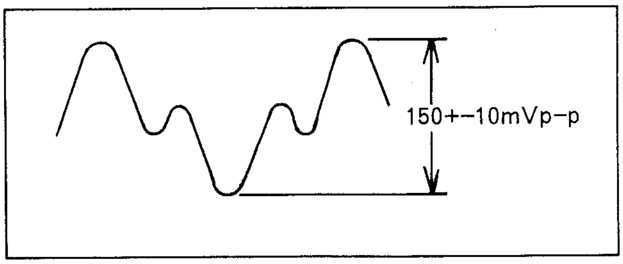


Fig. E26

2-3-26. JUMP VCO FREE RUN ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC3503-10	VR3502	STOP	
TAPE	**M. EQ.**	**SPEC.**	
	FREQUENCY COUNTER	32.50+-0.3(KHz)	

1. Connect the Frequency Counter to pin 10 of IC3503 through the amplifier as shown below.

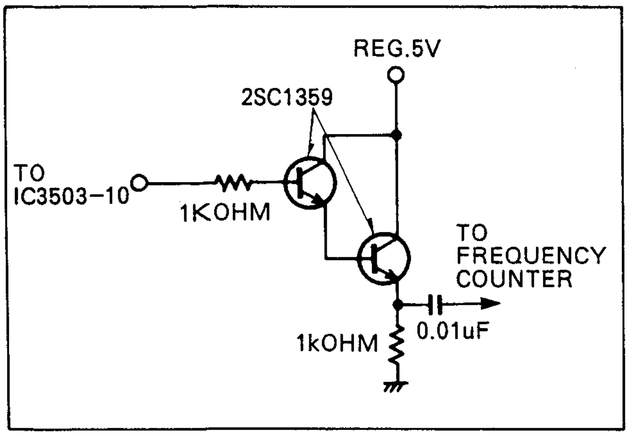

REG.5V
2SC1359
TO IC3503-10
1KOHM
TO FREQUENCY COUNTER
0.01uF
1kOHM

Fig. E27 Amplifier Circuit

2. Adjust VR3502 so that the reading of Frequency Counter is 32.50+-0.3KHz.

2-3-27. JUMP OUTPUT LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
P3503-1	VR3503	SELF RECORDING	COLOUR BAR (AV IN)
TAPE	**M. EQ.**	**SPEC.**	
S-VHS BLANK TAPE	OSCILLO-SCOPE	48+-2.5%	

1. Play back the just recorded portion.
2. Adjust VR3503 so that the luminance level of P3503-1 becomes 48+-2.5% comparing with the luminance level of P3502-1.

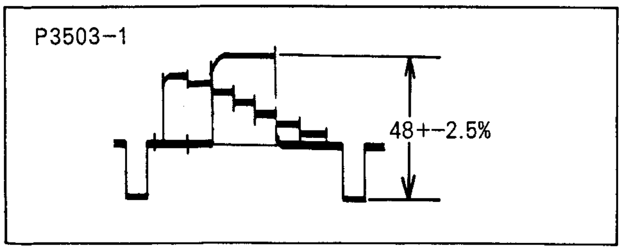

P3503-1
48+-2.5%

Fig. E28

2-3-28. JUMP DELAY LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
Input/Output Pack Pin-38	VR3501	SELF RECORDING (LP)	COLOUR BAR (AV IN)
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	OSCILLO-SCOPE	FLICKER IS MINIMIZED	

1. Set the Tape Speed Select to "LP" mode.
2. Play back the just recorded portion in Cue mode.
3. Adjust VR3501 so that the flicker of luminance signal is minimized.

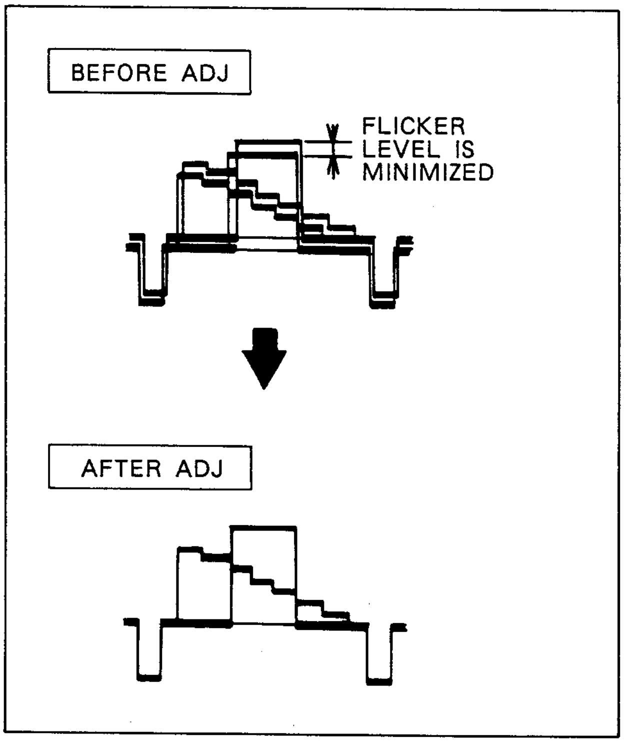

BEFORE ADJ
FLICKER LEVEL IS MINIMIZED
AFTER ADJ

Fig. E29

2-3-29. CHROMA DELAY LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
Input/Output Pack Pin-40	VR8502 VR8503	SELF RECORDING (LP)	COLOUR BAR (AV IN)
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	OSCILLO-SCOPE	FLICKER IS MINIMIZED	

1. Set the tape speed select to LP mode.
2. Play back the just recorded portion in still mode and adjust VR8502 so that the flicker is minimized.
3. Next, place the unit to X2 mode and adjust VR8503 so that the flicker is minimized.

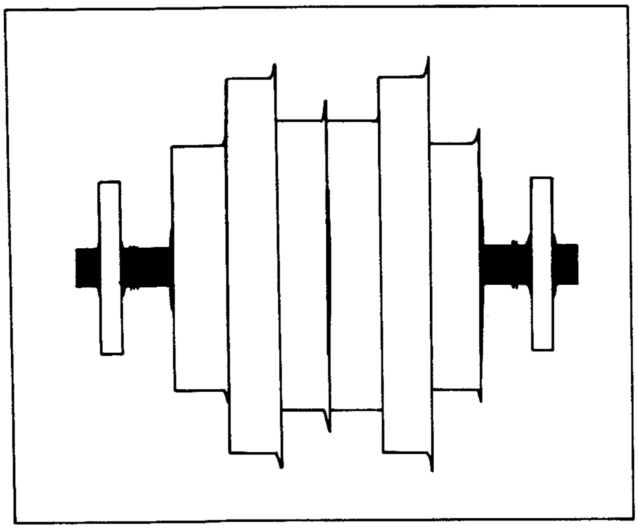


Fig. E30

2-3-30. AFC FREQUENCY ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC8012-3	VR8001	STOP	
TAPE	**M. EQ.**	**SPEC.**	
	FREQUENCY COUNTER	15625+-50(Hz)	

1. Connect a jumper wire between R8052 and R8048 to GND.
2. Connect the frequency counter to IC8012-3.
3. Adjust VR8001 for 15625+-50(Hz).

2-3-31. INPUT BELL FILTER ADJUSTMENT

TP	ADJ.	MODE	INPUT
Q8015-E	L8009	STOP	SINEWAVE (4.286MHz 400mVp-p) (AV IN)
TAPE	**M. EQ.**	**SPEC.**	
	SIGNAL GEN/ OSCILLOSCOPE	WAVEFORM IS MAXIMIZED	

1. Supply the sinewave (4.286MHz) to AV input socket.
2. Connect the oscilloscope to P8003-3 and set the signal generator so that the sinewave signal level becomes 400(mVp-p).
3. Connect the oscilloscope to Q8015-E.
4. Adjust L8009 so that the waveform is maximized as shown below.

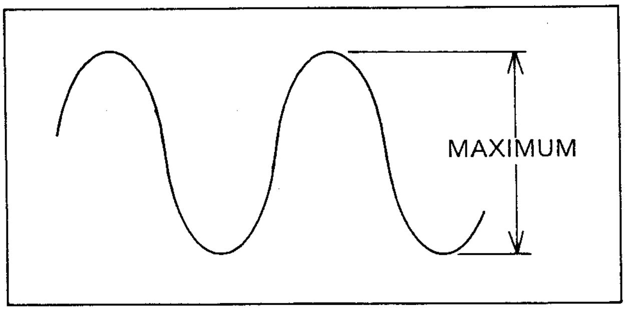


Fig. E31

2-3-32. SECAM DEMODULATOR ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC8013-20 IC8013-9	L8007 VR8002	STOP	SECAM COLOUR BAR (AV IN)
TAPE	**M. EQ.**	**SPEC.**	
	OSCILLOSCOPE	SUB CARRIER LEVEL IS MINIMIZED	

1. Supply the video signal to AV input socket.
2. Connect the oscilloscope to IC8013-20.
3. Adjust L8007 and VR8002 mutually so that the portion of no modulation and the pedestal portion become flat as shown in Fig. E32. (Rough Adjustment)

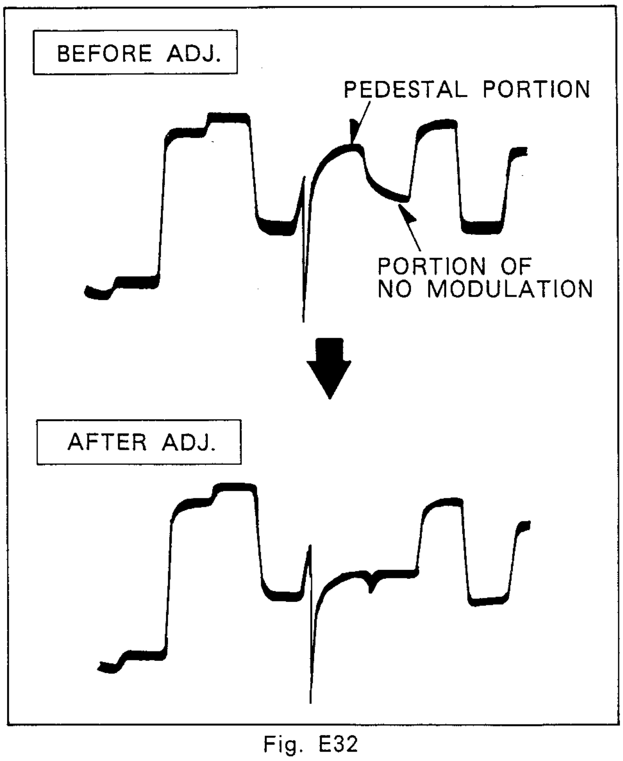


Fig. E32

4. Connect the oscilloscope to IC8013-9.
5. Adjust L8007 and VR8002 mutually so that the sub Carrier level is minimized as shown in Fig. E33.

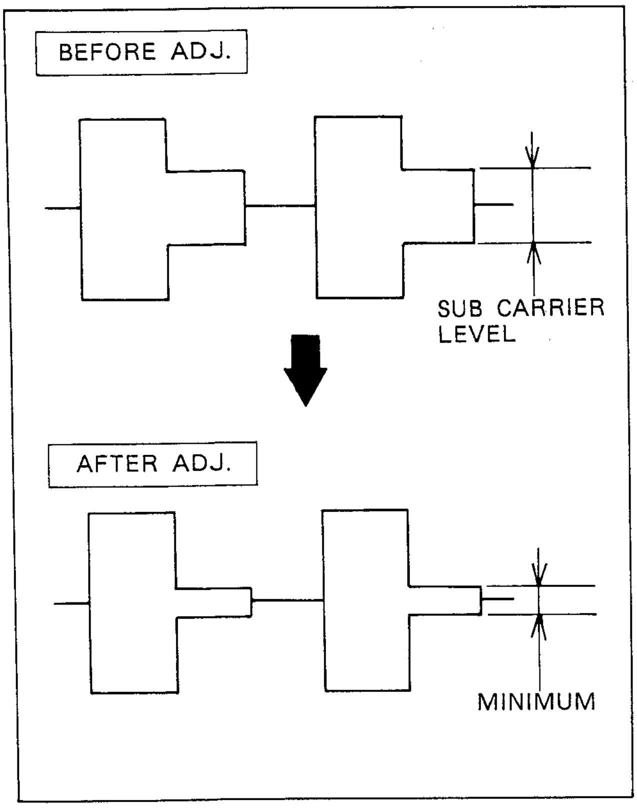


Fig. E33

2-3-33. 4.43MHz REFERENCE OSCILLATOR ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC801-31	C8081	STOP	SECAM COLOUR BAR (AV IN)
TAPE	**M. EQ.**	**SPEC.**	
	FREQUE-NCY COUNTER	4433619+-50(Hz)	

1. Set the Rec Format Selector to PAL position.
2. Supply the video signal to AV input socket.
3. Connect the frequency counter to IC801-31.
4. Adjust C8081 for 4433619+-50(Hz).

2-3-34. PAL OUTPUT LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
P8004-5	VR8003	STOP	SECAM COLOUR BAR (AV IN)
TAPE	**M. EQ.**	**SPEC.**	
	OSCILLO-SCOPE	1.2+-0.1(Vp-p)	

1. Supply the video signal to AV input socket.
2. Set the Output Signal Selector to PAL position.
3. Connect the oscilloscope to P8004-5.
4. Adjust VR8003 so that Cyan Level becomes 1.2+-0.1(Vp-p) as shown in Fig. E34.

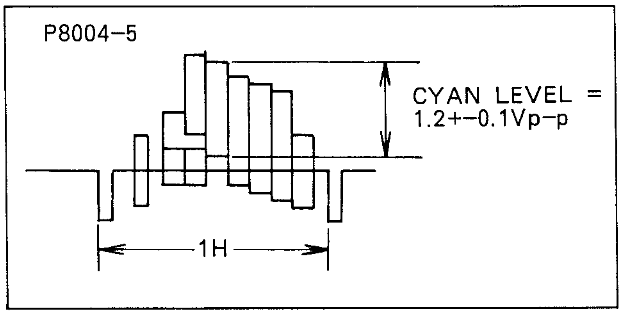


Fig. E34

2-3-35. 8.86MHz APC FREE RUN ADJUSTMENT

TP	ADJ.	MODE	INPUT
	C8097	PLAY	
TAPE	**M. EQ.**	**SPEC.**	
ALIGNMENT TAPE VFJ8125H3F	TV MONITOR	PICTURE IS COLOURED AND COLOUR BEAT IS ELIMINATED COMPLETELY	

1. Play back the colour bar portion of alignment tape.
2. Adjust C8097 so that picture is coloured and colour beat is eliminated completely.

2-3-36. PAL DEMODULATOR ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC8015-1	VR8005 L8015	STOP	PAL COLOUR BAR (AV IN)
TAPE	**M. EQ.**	**SPEC.**	
	OSCILLO-SCOPE	FLICKER LEVEL IS MINIMIZED	

1. Supply the video signal to AV input socket.
2. Connect the oscilloscope to IC8015–1.
3. Adjust VR8005 so that the signal level becomes 1Vp–p.
4. Adjust L8015 so that the flicker level is minimized as shown in Fig. E35.

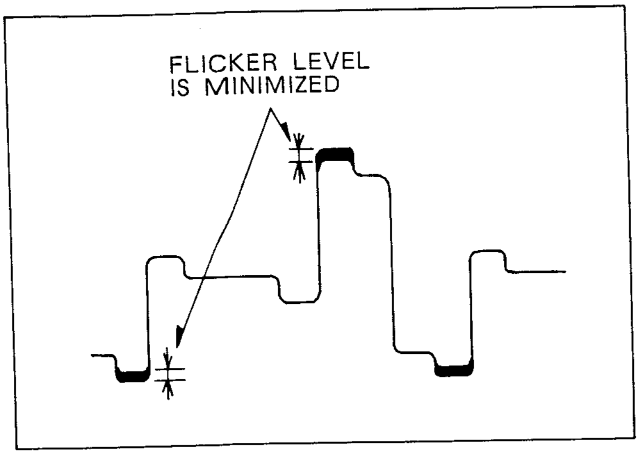


Fig. E35

2–3–37. SECAM DEVIATION ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC8016–5	VR8006 (R–Y) VR8008 (B–Y)	STOP	PAL COLOUR BAR (AV IN)
TAPE	**M. EQ.**	**SPEC.**	
	OSCILLO–SCOPE	R–Y/B–Y LEVEL = 500+–20(mVp–p)	

1. Supply the video signal to AV input socket.
2. Connect the oscilloscope to IC8016–5.
3. Adjust VR8008 so that the B–Y level becomes 500+–20(mVp–p) as shown in Fig. E37.
4. Adjust VR8006 so that the R–Y level becomes 500+–20(mVp–p) as shown in Fig. E37.

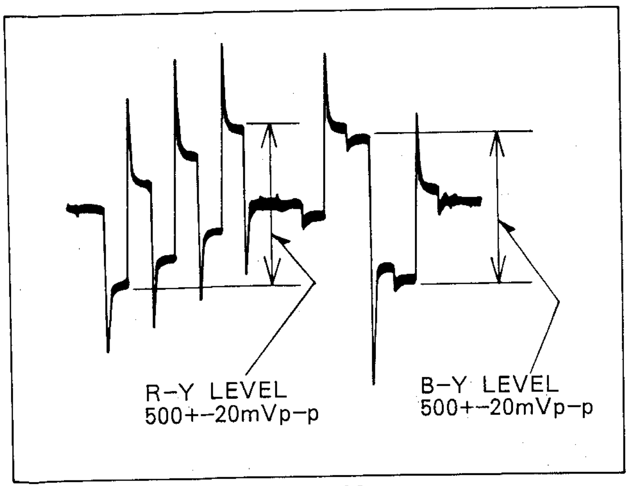


Fig. E36

2–3–38. OUTPUT BELL FILTER ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC8016–3	L8017	STOP	SINEWAVE (4.286MHz 1Vp–p) (AV IN)
TAPE	**M. EQ.**	**SPEC.**	
	SIGNAL GEN/ OSCILLO–SCOPE	WAVEFORM IS MINIMIZED	

1. Connect the capacitor (0.1uF) between IC8016–23 and 24.
2. Supply the sinewave (4.286MHz) to Q8020–B through the capacitor (0.1uF).
3. Connect the oscilloscope to Q8020–B and set the signal generator so that the sinewave signal level becomes 1(Vp–p).
4. Connect the oscilloscope to IC8016–3.
5. Adjust L8017 so that the waveform is minimized.

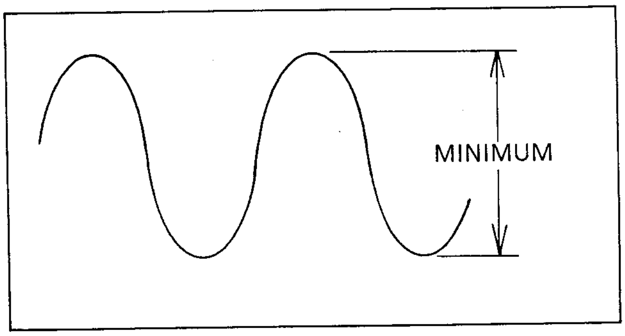


Fig. E37

2–3–39. SECAM MODULATOR CONTROL VOLTAGE ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC8016–15	FL8003	STOP	
TAPE	**M. EQ.**	**SPEC.**	
	OSCILLO–SCOPE	A=2.5+–0.1[V(DC)]	

1. Connect the oscilloscope to IC8016–15.
2. Adjust FL8003 so that the "A" level becomes 2.5+–0.1[V(DC)].

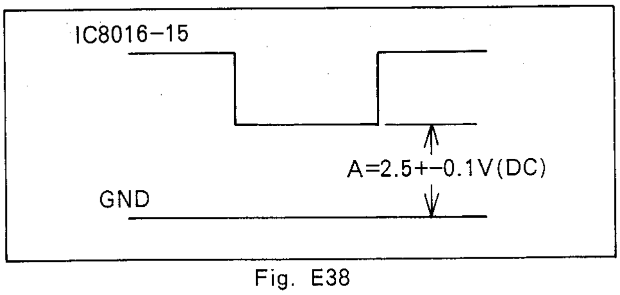


Fig. E38

2-3-40. SECAM OUTPUT LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
P8004-5	VR8007	STOP	PAL COLOUR BAR (AV IN)
TAPE	**M. EQ.**	**SPEC.**	
	OSCILLO-SCOPE	0.95+-0.05(Vp-p)	

1. Supply the video signal to AV input socket.
2. Set the Output Signal Selector to SECAM position.
3. Connect the oscilloscope to P8004-5.
4. Adjust VR8007 so that the Cyan level becomes 0.95+-0.05(Vp-p).

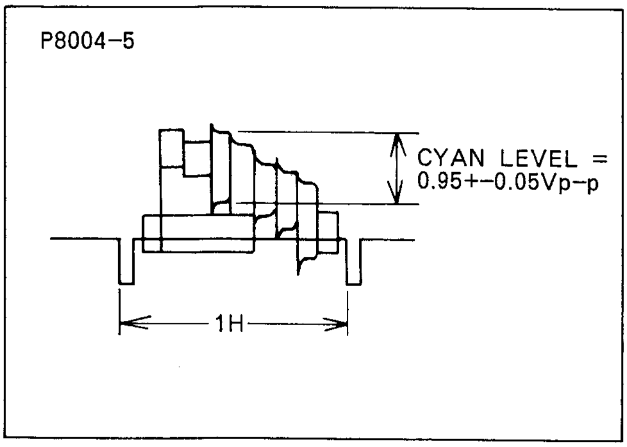


Fig. E39

2-3-41. BELL FILTER ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC8501-8	FL8507	REC	SINEWAVE (4.286MHz, 800mVp-p) (AV IN)
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	SIGNAL GEN/ OSCILLO-SCOPE	WAVEFORM IS MAXIMIZED	

1. Supply the sinewave (4.286MHz) to P8501-7.
2. Connect the oscilloscope to P8501-3 and set the signal generator so that the sinewave signal level becomes 800mVp-p.
3. Connect the oscilloscope to IC8501-8.
4. Adjust FL8507 so that the waveform is maximized.

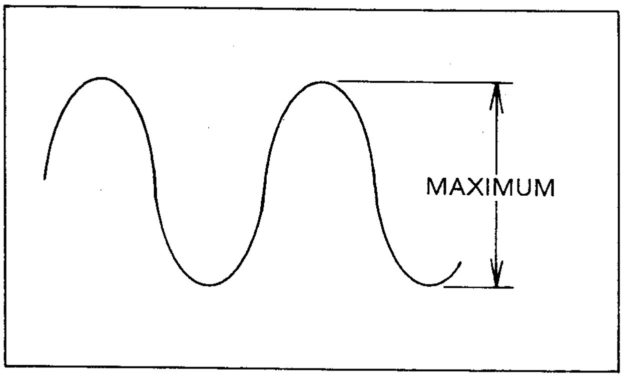


Fig. E40

2-3-42. SECAM KILLER ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC8502-11	T8501	REC	SECAM COLOUR BAR (AV IN)
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	OSCILLO-SCOPE	MAXIMUM AS POSSIBLE	

1. Supply the video signal to AV input socket.
2. Connect the oscilloscope to IC8502-11.
3. Record the colour bar.
4. Adjust T8501 so that the points "A" becomes maximum on waveform.

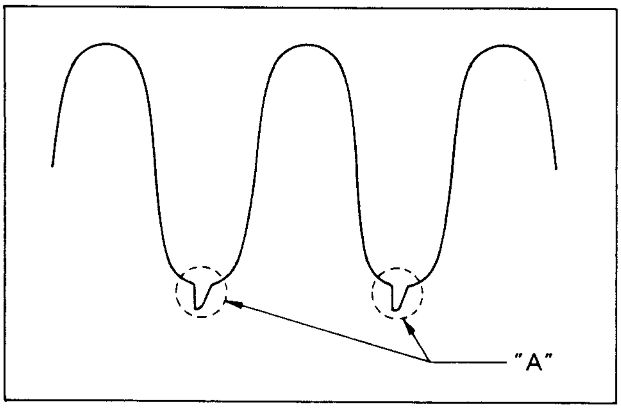


Fig. E41

2-3-43. SECAM RECORDING CURRENT ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP507 (HOT) TP508 (GND)	VR8501	REC (SP MODE)	SECAM COLOUR BAR (AV IN)
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	OSCILLO-SCOPE	28+-2(mVp-p)	

1. Supply the video signal to AV input socket.
2. Set the S-VHS selector to OFF position.
3. Connect the oscilloscope to TP507 (HOT) and TP508 (GND).
4. Supply the 5V (DC) to cathode of D3004.
5. Record the colour bar.
6. Adjust VR8501 so that the SECAM recording current becomes 28+−2(mVp−p).

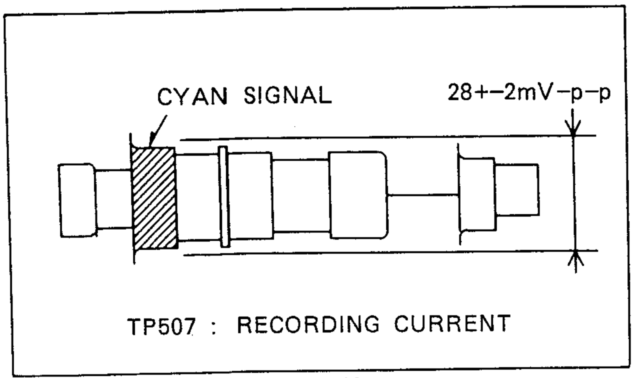


Fig. E42

2-3-44. BLANKING PULSE PHASE ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP3002 P3001−4	VR3002	REC	SECAM COLOUR BAR (AV IN)

TAPE	M. EQ.	SPEC.
BLANK TAPE	OSCILLO-SCOPE	T=1.2+−0.2 (usec)

1. Supply the video signal to AV input socket.
2. Set the S-VHS selector to OFF position.
3. Connect the oscilloscope to TP3002 and P3001−4.
4. Record the colour bar.
5. Adjust VR3002 so that the period of "T" becomes 1.2+−0.2(usec).

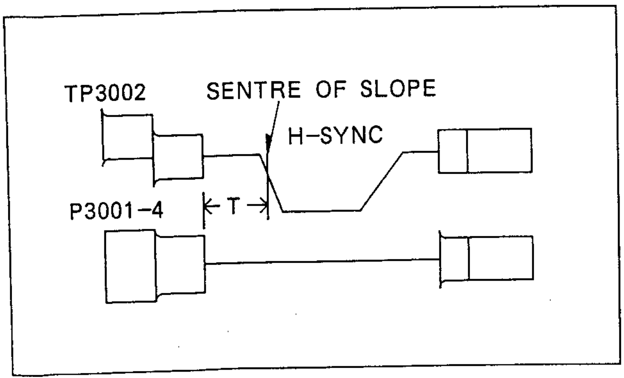


Fig. E43

2-3-45. SECAM PLAYBACK LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
AV OUT	VR8502	SELF RECORDING	SECAM COLOUR BAR (AV IN)

TAPE	M. EQ.	SPEC.
BLANK TAPE	OSCILLO-SCOPE	0.21+−0.025(Vp−p)

1. Supply the video signal to AV input socket.
2. Set the S-VHS selector to OFF position.
3. Connect the oscilloscope to AV output.
4. Playback the just recorded portion.
5. Adjust VR8502 so that the magenta level becomes 0.21+−0.025(Vp−p).

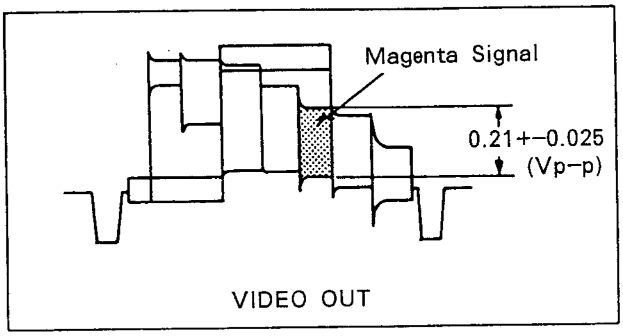


Fig. E44

TIMER Section

2-3-46. TIMER CLOCK ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP7501	C7501		

TAPE	M. EQ.	SPEC.
	UNIVER-SAL COUNTER	7812.5+−0.015us

Note:
1) Do not connect the AC power plug.
2) Make a short circuit at C1003 to discharge.

1. Set the voltage of the DC power supply for 5.0V+−0.1V and supply it to P7501-3 P7501-4 (+) and GND (−).
2. Connect a jumper wire between P7501-6 and GND
3. Connect the universal counter to TP7501.
4. Adjust C7501 so that the period becomes 7812.5+-0.015us.

NORMAL AUDIO Section

2-3-47. AUDIO BIAS CURRENT ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP4002 (HOT) TP4003 (GND)	VR4002	RECORDING	
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE (VHS type)	V.T.V.M.	2.9+-0.1mVrms	

Note:

1) Make a short circuit at terminal of the Audio Input.

2-3-48. AUDIO PLAYBACK LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
AUDIO OUT	VR4001	SELF RECORDING (SP MODE)	1kHz,-10dB AUDIO SIG/ VIDEO SIG (AV IN)
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	SIGNAL GENERATOR/ V.T.V.M.	E-E LEVEL = -7+-2dB (355mVrms ~ 560mVrms) PLAYBACK LEVEL = E-E LEVEL+-0.5dB (+-20mVrms)	

1. Set the Audio Playback Mode Selector to NORMAL Position by infrared remotecontroller.
   (Both the Left and Right Indicators are not lit.)
2. Playback the just recorded portion.
3. Adjust VR4001 so that the level of the playback waveform becomes E-E level+-0.5dB(+-20mVrms)

Note:

1. Befor this adjustment, "Tape Interchangeability Adjustment" and "Audio Bias Current Adjustment" must be completed.
2. Video signal must be connected to video input.

Hi-Fi AUDIO Section

2-3-49. LEVEL METER SENSITIVITY ADJUSTMENT

TP	ADJ.	MODE	INPUT
LEVEL METER	VR4004	STOP	1kHz -10dB
TAPE	**M. EQ.**	**SPEC.**	
	SIGNAL GENERATOR	0dB indicator just lights up	

1. Set the Audio Playback Mode Selector to STEREO position by infrared remotecontroller. (Both the Left and Right Indicators are lit.
2. Adjust the output level with the Audio Rec Level Controls so that the audio outputs are 400mVrms at both Output Jacks (L) and (R).
3. Adjust VR4004 so that the 0dB indicator just lights up on the level meter as shown below.

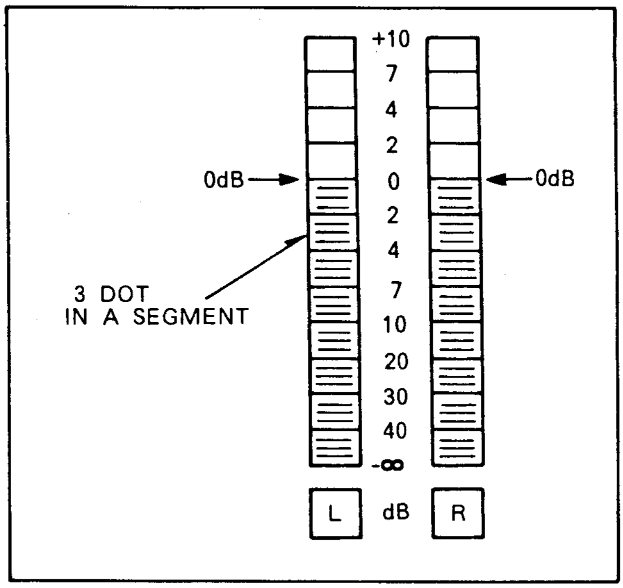


Fig. E45

2-3-50. Hi-Fi AUDIO RECORDING CURRENT ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP4507 (HOT) SHIELD CASE(GND)	VR4503	RECORDING (SP MODE)	
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	OSCILLOSCOPE	480+-10mVp-p	

1. Set the Input Select SW to AV.
2. Set the Audio Playback Mode Selector to "STEREO" position. (Both the Left and Right Indicators are lit.)
3. Connect the OSCILLOSCOPE to TP4507 (HOT) and SHIELD CASE (GND).
4. Adjust VR4503 so that the Audio recording current become 480+-10mVp-p as shown below.

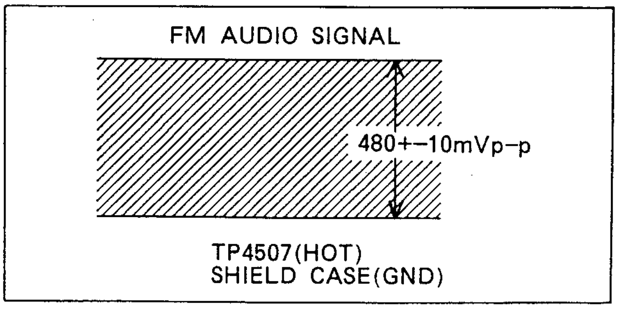


Fig. E46

Note:
Prior to HiFi Audio Muting Adjustment, this adjustment must be completed.

2-3-51. AUDIO HEAD SWITCHING SHIFTER ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP4511 TP2001	VR4510	PLAY	
TAPE	**M. EQ.**	**SPEC.**	
ALIGNMENT TAPE VFJ8 125H3F	OSCILLO-SCOPE	$T = \frac{T2-(T2-T1)\ \text{msec.}}{2}$	

1. Play back the alignment tape (VFJ8125H3F).
2. Connect the oscilloscope to TP4511 and TP2001.
3. Play back the just recorded portion.
4. Adjust VR4510 while Instening to the stereo playback sound.
   - (1) Confirm the "T2" time when the abnormal sound just occurs during turning clockwise on VR4510.
   - (2) Confirm the "T1" time when the abnormal sound just occurs during turning counter clockwise on VR4510.
   - (3) Adjust VR4510 so that the falling edge "T" of Audio H.SW pulse becomes the center portion of the both "T2" and "T1".

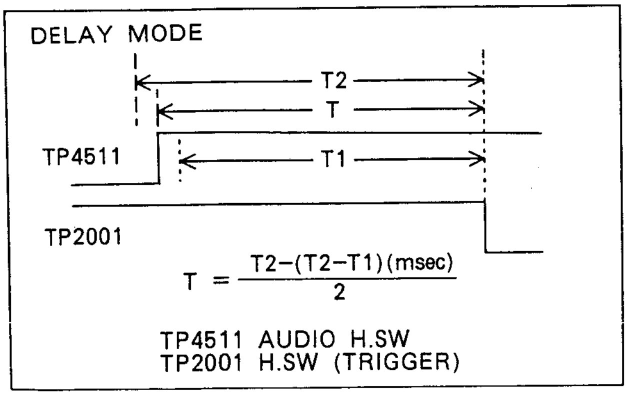


Fig. E47

2-3-52. AUDIO MUTING ADJUSTMENT

TP	ADJ.	MODE	INPUT
	VR4505	SELF RECORDING	VIDEO SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	OSCILLO-SCOPE	STEREO indication just lights up	

Note 1:
Before this adjustment "Tape Interchangeability Adjustment" must be completed.

Note2:
To achieve this adjustment, the luminance recording current adjustment should be performed as follows.
First connect the oscilloscope to TP503 (HOT) and TP504 (GND) and then adjust VR501 for 150mVp-p [refer to S-VHS Luminance Recording current Adjustment (Item 2-4-12)].
After this adjustment, the luminance recording current adjustment must be returned to original position again.

1. Set Audio Playback Mode Selector to STEREO position. (Both the Left and Right Indicators are lit.)
2. Preadjust VR4505 until the Hi-Fi indicator on the front panel display turns the NORMAL indication.
3. Then slowly adjust VR4505 where the STEREO indication just lights up.
4. Confirm that the abnormal sound does not contain in the playback Hi-Fi sound.

2-3-53. Hi-Fi AUDIO CARRIER FREQUENCY ADJUSTMENT

TP	ADJ.	MODE	INPUT
BETWEEN C4516 AND R4513(L) BETWEEN C4566 AND R4563(R)	VR4501(L) VR4509(R)	STOP	
TAPE	**M. EQ.**	**SPEC.**	
	FREQUENCY COUNTER	1400+-3KHz(L) 1800+-3KHz(R)	

2-3-54. AUDIO DEVIATION ADJUSTMENT

TP	ADJ.	MODE	INPUT
BETWEEN VR4502 AND R4511 (L) BETWEEN VR4507 AND R4561 (R)	VR4502(L) VR4507(R)	RECORDING	1KHz,-10dB (316mVp-p) AUDIO SIGNAL
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	SIGNAL GENERATOR/ D.V.M.	360mVp-p	

1. Set the output of the Signal generator to 1KHz and -10dB, and supply it to both input jacks (L) and (R).
   Next, adjust the recording with the Audio Rec Level Controls so that the audio outputs are 400mVrms at both Output Jacks (L) and (R).
2. Adjust VR4502 to 360mVp-p at between VR4502 and R4511 on HiFi AUDIO C.B.A. for L-Channel.
3. Adjust VR4507 to 360mVp-p at between VR4507 and R4561 on HiFi AUDIO C.B.A. for R-Channel.

2-3-55. Hi-Fi AUDIO RECORDING LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
AUDIO OUT	VR4512	STOP	1kHz,-10dB (316mV p-p) AUDIO SIGNAL (AV IN)
TAPE	**M. EQ.**	**SPEC**	
	SIGNAL GENERATOR/ V. T. V. M.	-7+-0.5dB (420~470mV rms)	

1. Set the Audio Playback Mode Selector to STEREO position by infrared remotecontroller.
2. Set the Input Select SW to AV.
3. Adjust VR4512 so that the level of ch (R) becomes -7+-0.5dB (420~470mV rms).

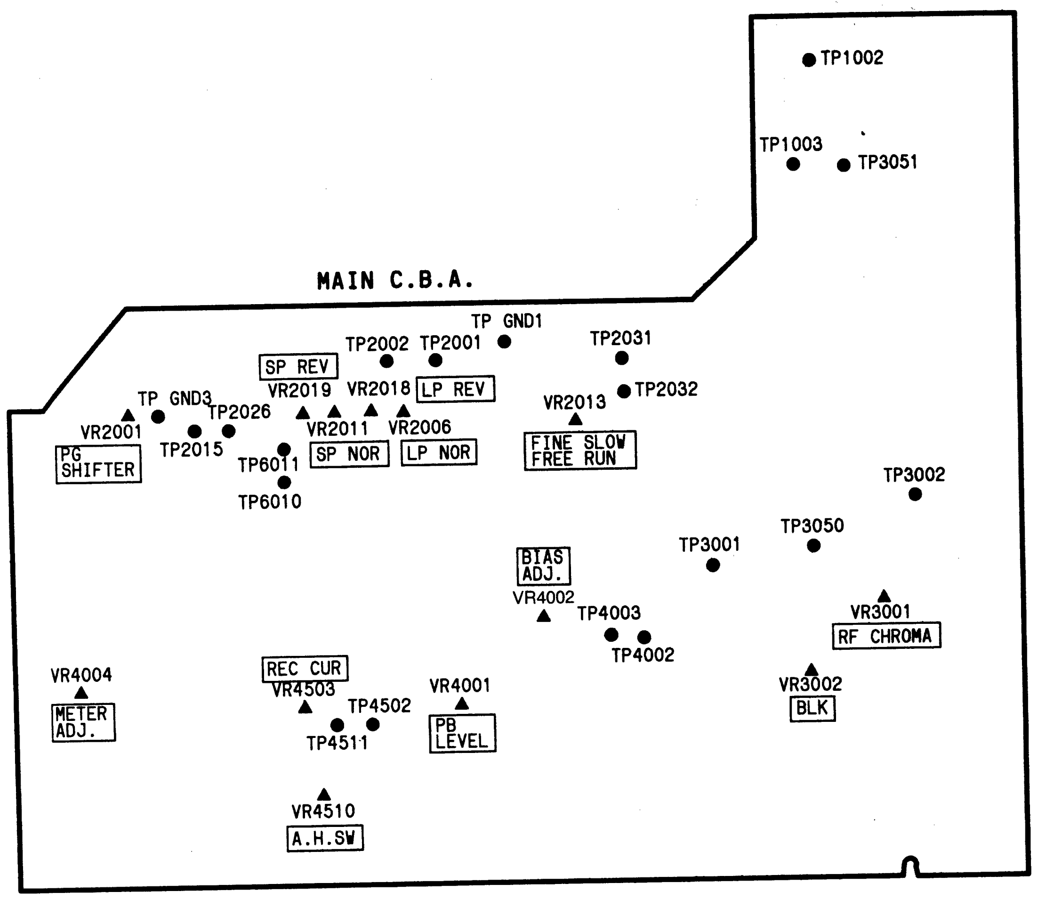
2-3-56. Hi-Fi AUDIO PLAYBACK LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
AUDIO OUT	VR4001	SELF RECORDING (SP MODE)	1kHz,-10dB (316mV p-p) AUDIO SIGNAL (AV IN)
TAPE	**M. EQ.**	**SPEC**	
BLANK TAPE	SIGNAL GENERATOR/ V. T. V. M.	-7+-2dB (420~470mV rms)	

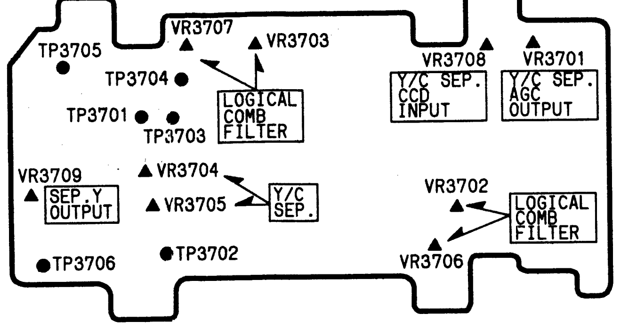
1. Set the Audio Playback Mode Selector to STEREO position by infrared remotecontroller.
2. Playback the just recorded portion.
3. Adjust VR4001 so that the level of CH(R) and (L) becomes -7+-2dB (420~470mV rms).

LOCATION OF TEST POINTS & CONTROLS

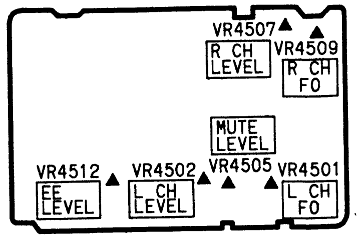
MAIN C.B.A.


TP1002
TP1003
TP3051
TP GND1
TP2002
TP2001
TP2031
SP REV
VR2019
VR2018
LP REV
TP2032
VR2013
TP GND3
TP2026
VR2001
TP2015
VR2011
VR2006
PG SHIFTER
TP6011
SP NOR
LP NOR
FINE SLOW FREE RUN
TP6010
TP3002
TP3050
TP3001
BIAS ADJ.
VR4002
TP4003
TP4002
VR3001
RF CHROMA
VR4004
REC CUR
VR4503
VR4001
VR3002
METER ADJ.
TP4502
TP4511
PB LEVEL
BLK
VR4510
A.H.SW

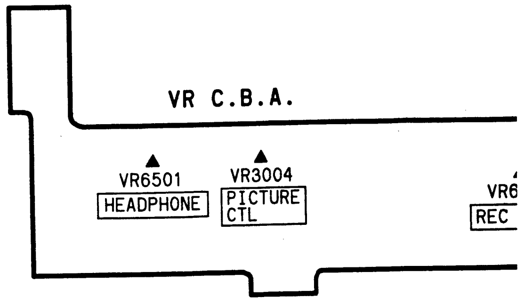
LUMINANCE & CHROMINANCE SEPARATION C.B.A.


TP3705
VR3707
VR3703
VR3708
VR3701
TP3704
Y/C SEP. CCD INPUT
Y/C SEP. AGC OUTPUT
TP3701
TP3703
LOGICAL COMB FILTER
VR3709
VR3704
SEP.Y OUTPUT
VR3705
Y/C SEP.
VR3702
LOGICAL COMB FILTER
TP3706
TP3702
VR3706

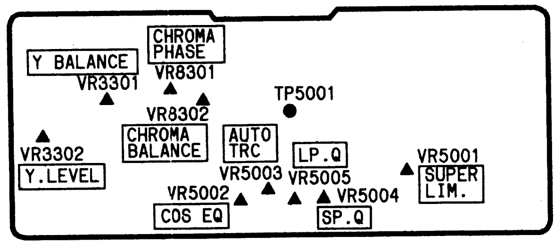
Hı-Fı AUDIO PACK C.B.A.


VR4507
R CH LEVEL
VR4509
R CH FO
MUTE LEVEL
VR4512
VR4502
VR4505
VR4501
EE LEVEL
L CH LEVEL
L CH FO

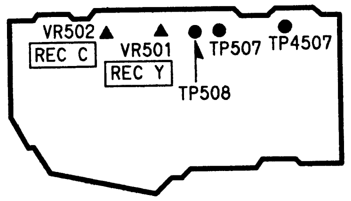
VR C.B.A.


VR6501
HEADPHONE
VR3004
PICTURE CTL
VR6
REC

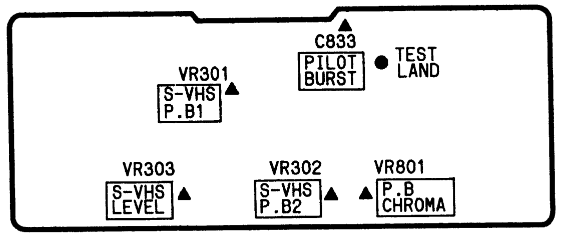
HQ PACK C.B.A.


CHROMA PHASE
Y BALANCE
VR3301
VR8301
VR8302
TP5001
VR3302
Y.LEVEL
CHROMA BALANCE
AUTO TRC
LP.Q
VR5003
VR5005
VR5001
SUPER LIM.
VR5002
VR5004
COS EQ
SP.Q

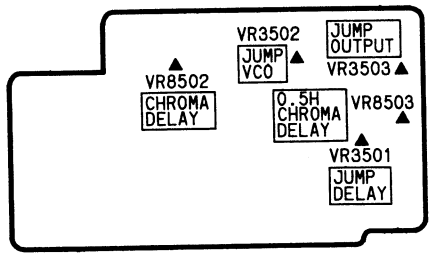
HEAD AMP C.B.A.


VR502
REC C
VR501
REC Y
TP507
TP4507
TP508

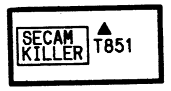
LUMINANCE & CHROMINANCE PACK C.B.A.


C833
PILOT BURST
TEST LAND
VR301
S-VHS P.B1
VR303
S-VHS LEVEL
VR302
S-VHS P.B2
VR801
P.B CHROMA

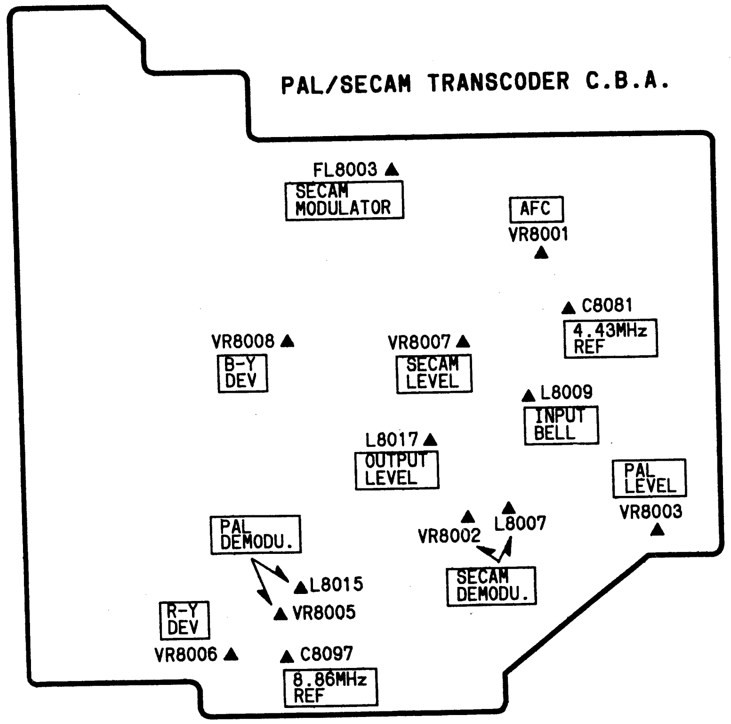
SUB LUMINANCE & CHROMINANCE C.B.A.


VR3502
JUMP VCO
JUMP OUTPUT
VR3503
VR8502
CHROMA DELAY
0.5H CHROMA DELAY
VR8503
VR3501
JUMP DELAY

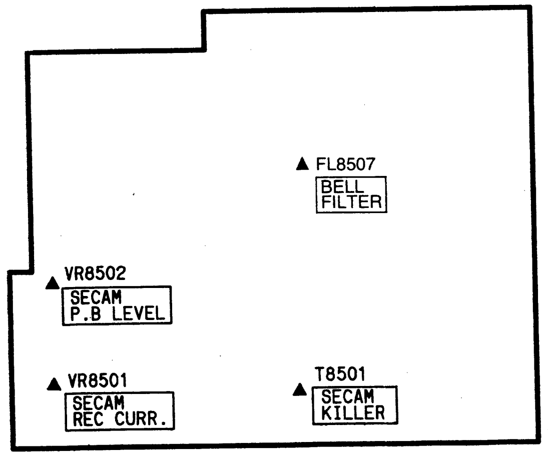
DDR SECAM PACK C.B.A.


SECAM KILLER
T851

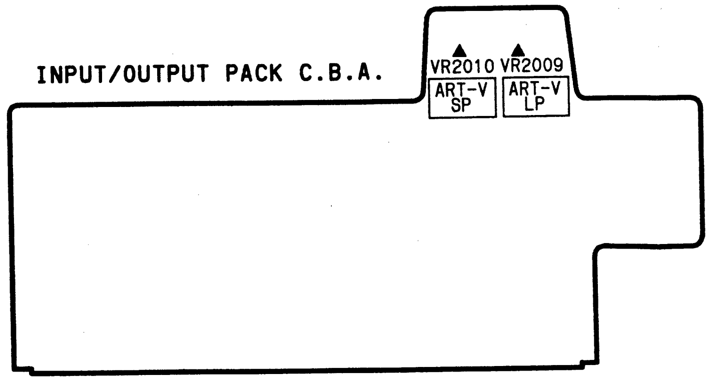
PAL/SECAM TRANSCODER C.B.A.


FL8003
SECAM MODULATOR
AFC
VR8001
C8081
4.43MHz REF
VR8008
B-Y DEV
VR8007
SECAM LEVEL
L8009
INPUT BELL
L8017
OUTPUT LEVEL
PAL LEVEL
VR8003
PAL DEMODU.
VR8002
L8007
SECAM DEMODU.
L8015
VR8005
R-Y DEV
VR8006
C8097
8.86MHz REF

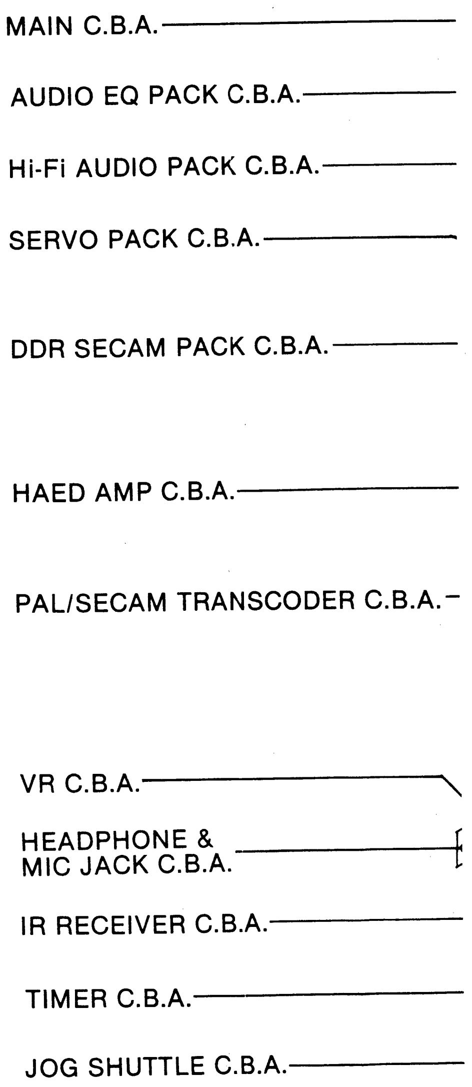
SECAM CHROMINANCE C.B.A.


FL8507
BELL FILTER
VR8502
SECAM P.B LEVEL
VR8501
SECAM REC CURR.
T8501
SECAM KILLER

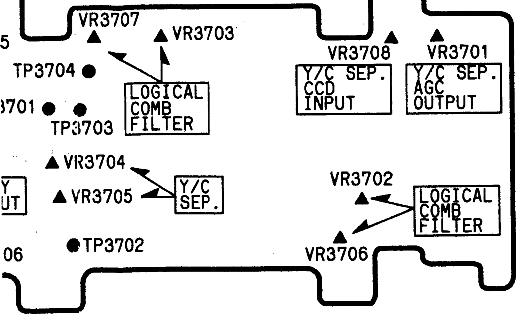
INPUT/OUTPUT PACK C.B.A.


VR2010
ART-V SP
VR2009
ART-V LP

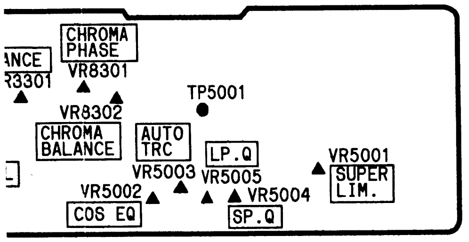
CIRCUIT BOARD LAYOU


MAIN C.B.A.
AUDIO EQ PACK C.B.A.
Hi-Fi AUDIO PACK C.B.A.
SERVO PACK C.B.A.
DDR SECAM PACK C.B.A.
HAED AMP C.B.A.
PAL/SECAM TRANSCODER C.B.A.
VR C.B.A.
HEADPHONE & MIC JACK C.B.A.
IR RECEIVER C.B.A.
TIMER C.B.A.
JOG SHUTTLE C.B.A.

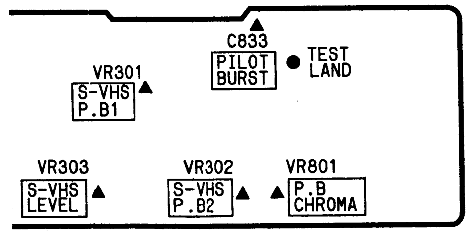
LUMINANCE & CHROMINANCE SEPARATION C.B.A.


VR3707
VR3703
5
TP3704
3701
TP3703
LOGICAL COMB FILTER
VR3708
VR3701
Y/C SEP. CCD INPUT
Y/C SEP. AGC OUTPUT
VR3704
VR3705
Y/C SEP.
Y UT
VR3702
LOGICAL COMB FILTER
06
TP3702
VR3706

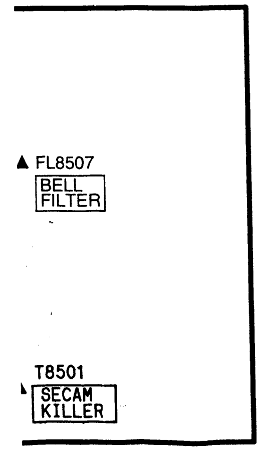
HQ PACK C.B.A.


CHROMA PHASE
ANCE
R3301
VR8301
TP5001
VR8302
CHROMA BALANCE
AUTO TRC
LP.Q
VR5001
SUPER LIM.
VR5003
VR5005
VR5002
VR5004
COS EQ
SP.Q

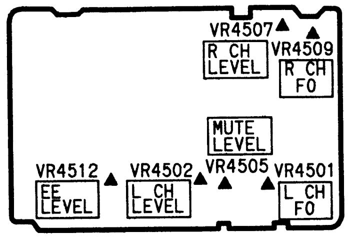
ANCE & CHROMINANCE PACK C.B.A.


C833
PILOT BURST
TEST LAND
VR301
S-VHS P.B1
VR303
S-VHS LEVEL
VR302
S-VHS P.B2
VR801
P.B CHROMA

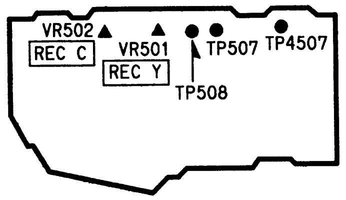
E C.B.A.


FL8507
BELL FILTER
T8501
SECAM KILLER

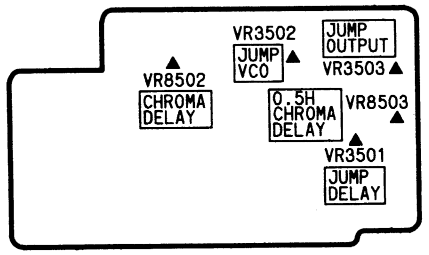
Hi-Fi AUDIO PACK C.B.A.


VR4507
R CH LEVEL
VR4509
R CH FO
MUTE LEVEL
VR4512
EE LEVEL
VR4502
L CH LEVEL
VR4505
VR4501
L CH FO

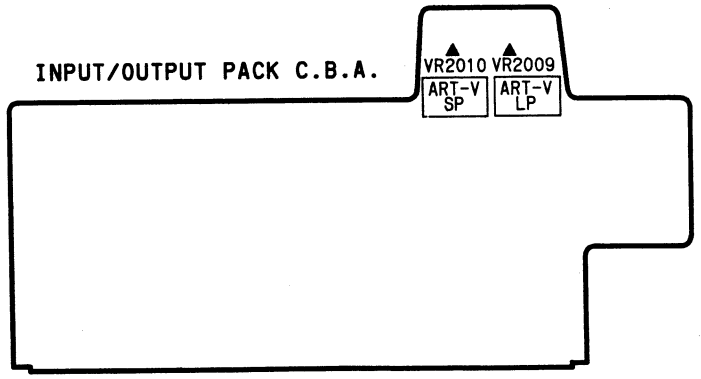
HEAD AMP C.B.A.


VR502
REC C
VR501
REC Y
TP507
TP4507
TP508

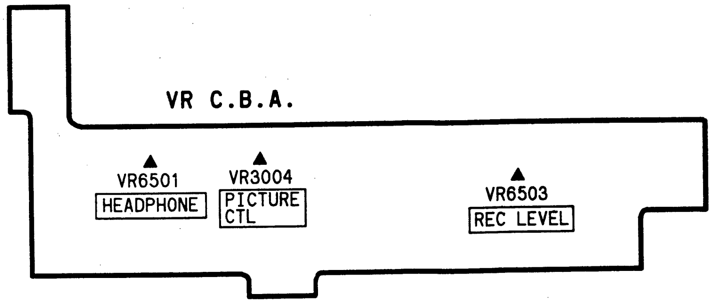
SUB LUMINANCE & CHROMINANCE C.B.A.


VR3502
JUMP VCO
JUMP OUTPUT
VR3503
VR8502
CHROMA DELAY
0.5H CHROMA DELAY
VR8503
VR3501
JUMP DELAY

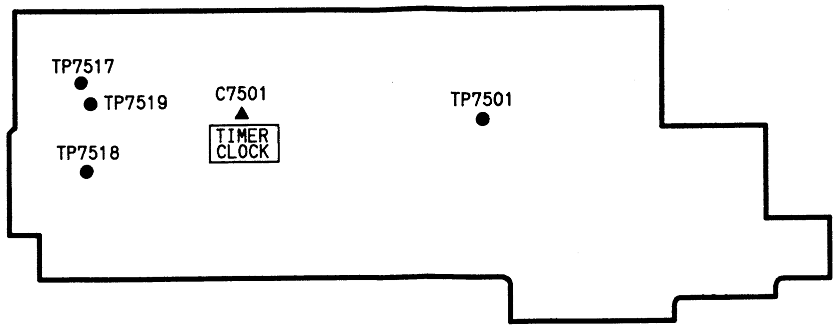
INPUT/OUTPUT PACK C.B.A.


VR2010
VR2009
ART-V SP
ART-V LP

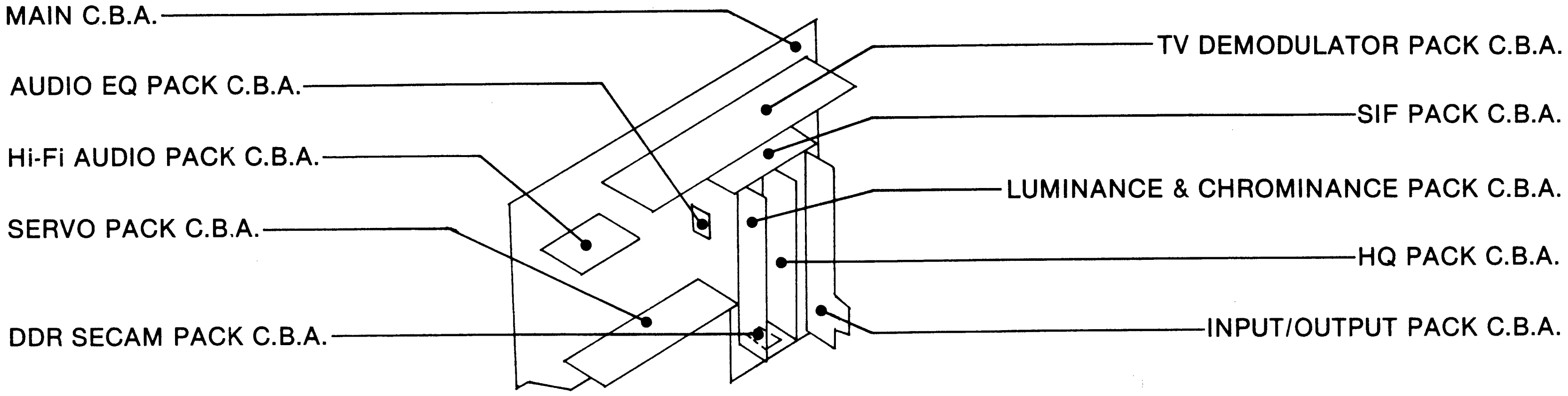
VR C.B.A.

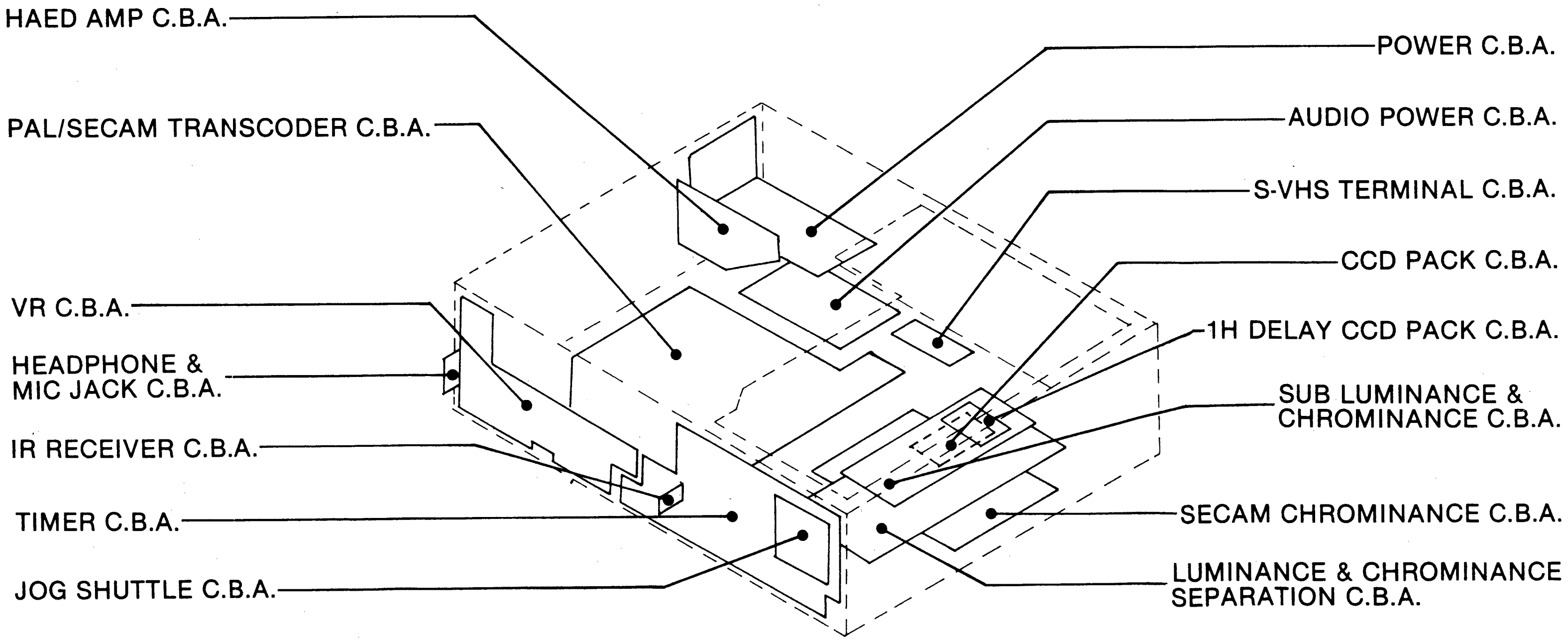

VR6501
HEADPHONE
VR3004
PICTURE CTL
VR6503
REC LEVEL

TIMER C.B.A.


TP7517
TP7519
C7501
TIMER CLOCK
TP7501
TP7518

CIRCUIT BOARD LAYOUT

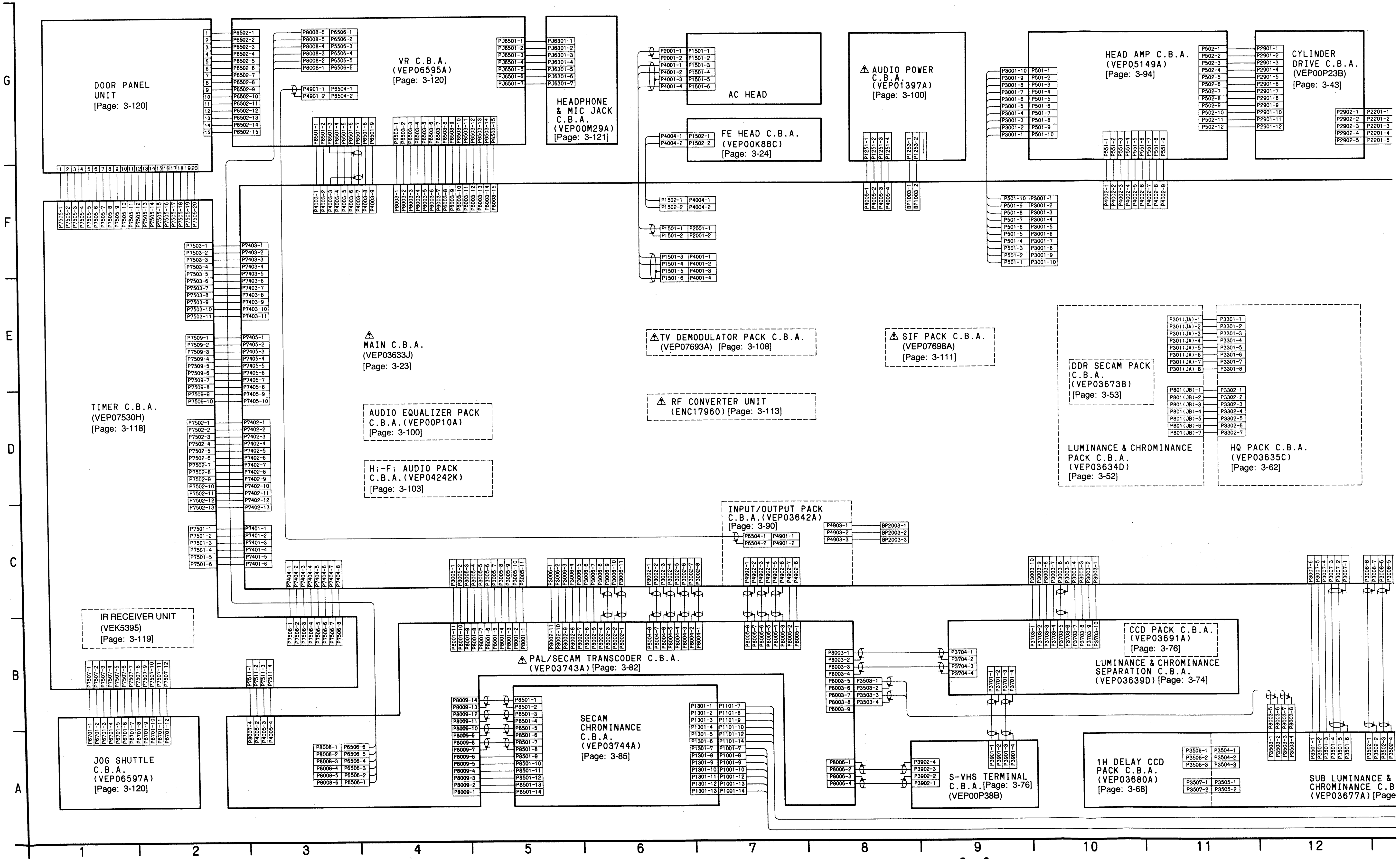

MAIN C.B.A.
AUDIO EQ PACK C.B.A.
Hi-Fi AUDIO PACK C.B.A.
SERVO PACK C.B.A.
DDR SECAM PACK C.B.A.
TV DEMODULATOR PACK C.B.A.
SIF PACK C.B.A.
LUMINANCE & CHROMINANCE PACK C.B.A.
HQ PACK C.B.A.
INPUT/OUTPUT PACK C.B.A.

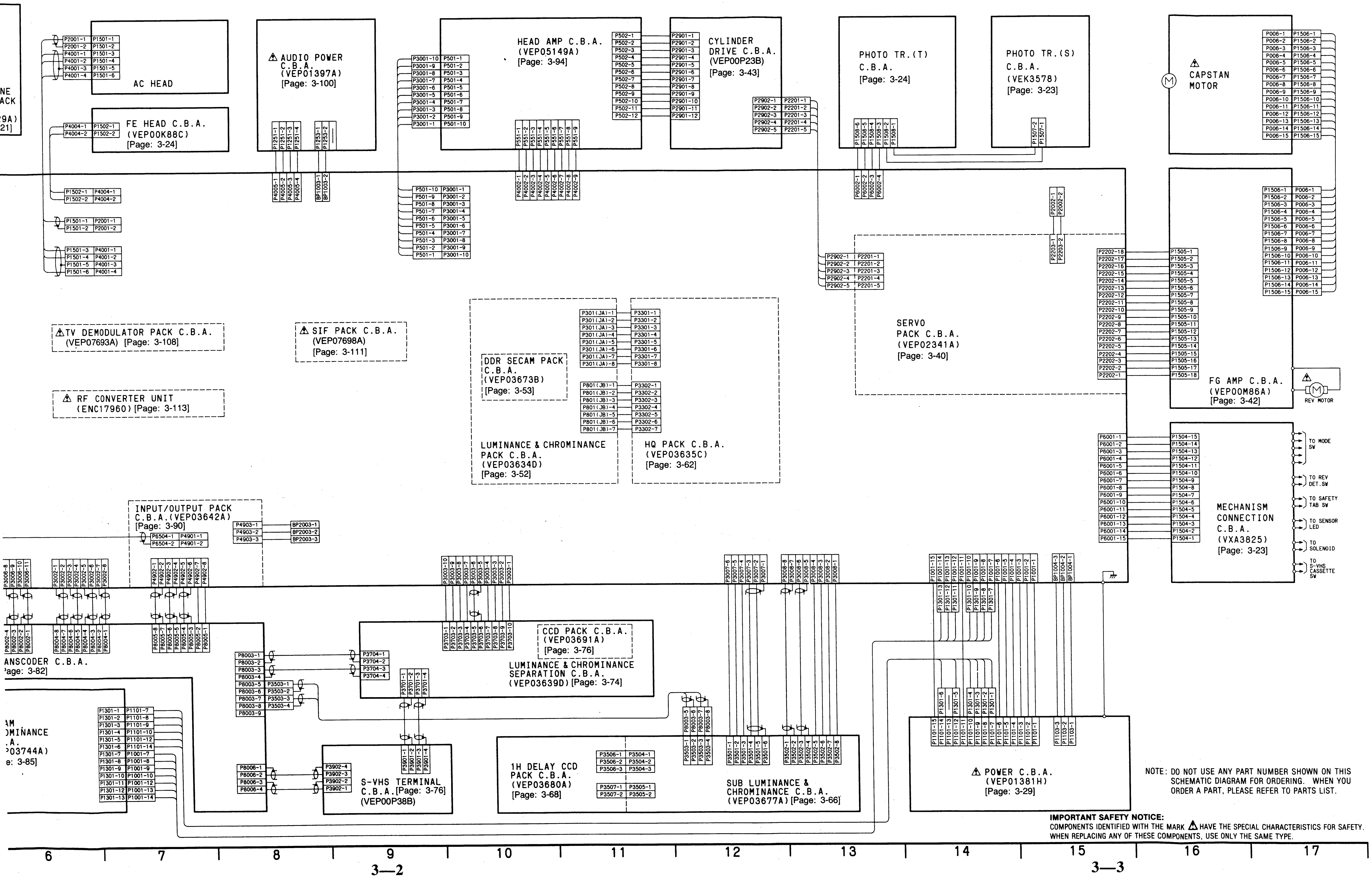

HAED AMP C.B.A.
PAL/SECAM TRANSCODER C.B.A.
VR C.B.A.
HEADPHONE & MIC JACK C.B.A.
IR RECEIVER C.B.A.
TIMER C.B.A.
JOG SHUTTLE C.B.A.
POWER C.B.A.
AUDIO POWER C.B.A.
S-VHS TERMINAL C.B.A.
CCD PACK C.B.A.
1H DELAY CCD PACK C.B.A.
SUB LUMINANCE & CHROMINANCE C.B.A.
SECAM CHROMINANCE C.B.A.
LUMINANCE & CHROMINANCE SEPARATION C.B.A.

SECTION 3

BLOCK DIAGRAMS & SCHEMATIC DIAGRAMS

3-1. INTERCONNECTION SCHEMATIC DIAGRAM

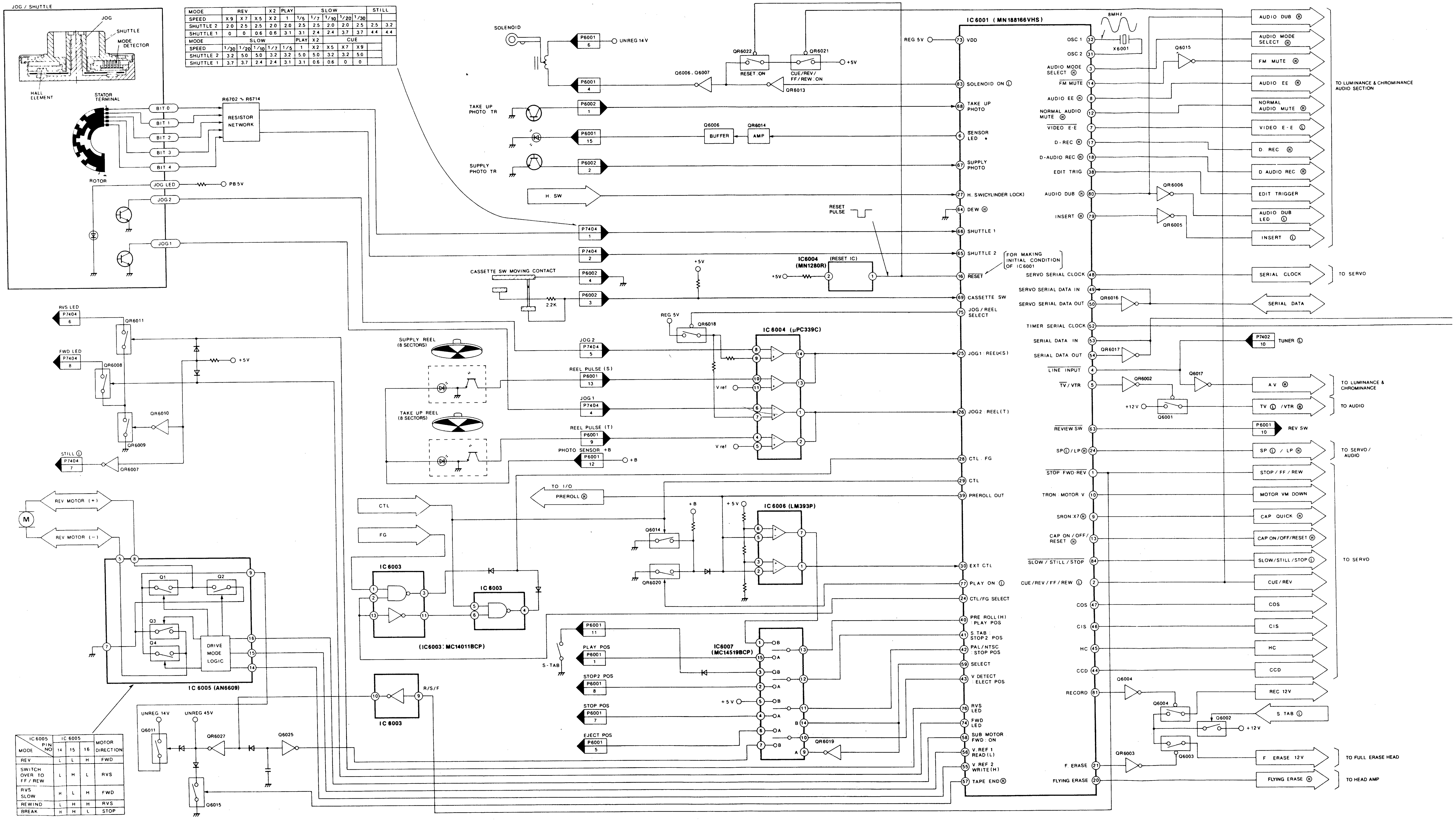

DOOR PANEL UNIT [Page: 3-120]
VR C.B.A. (VEP06595A) [Page: 3-120]
HEADPHONE & MIC JACK C.B.A. (VEP00M29A) [Page: 3-121]
AC HEAD
FE HEAD C.B.A. (VEP00K88C) [Page: 3-24]
⚠ AUDIO POWER C.B.A. (VEP01397A) [Page: 3-100]
HEAD AMP C.B.A. (VEP05149A) [Page: 3-94]
CYLINDER DRIVE C.B.A. (VEP00P23B) [Page: 3-43]
TIMER C.B.A. (VEP07530H) [Page: 3-118]
⚠ MAIN C.B.A. (VEP03633J) [Page: 3-23]
⚠TV DEMODULATOR PACK C.B.A. (VEP07693A) [Page: 3-108]
⚠ SIF PACK C.B.A. (VEP07698A) [Page: 3-111]
⚠ RF CONVERTER UNIT (ENC17960) [Page: 3-113]
AUDIO EQUALIZER PACK C.B.A. (VEP00P10A) [Page: 3-100]
Hi-Fi AUDIO PACK C.B.A. (VEP04242K) [Page: 3-103]
DDR SECAM PACK C.B.A. (VEP03673B) [Page: 3-53]
LUMINANCE & CHROMINANCE PACK C.B.A. (VEP03634D) [Page: 3-52]
HQ PACK C.B.A. (VEP03635C) [Page: 3-62]
INPUT/OUTPUT PACK C.B.A. (VEP03642A) [Page: 3-90]
IR RECEIVER UNIT (VEK5395) [Page: 3-119]
⚠ PAL/SECAM TRANSCODER C.B.A. (VEP03743A) [Page: 3-82]
CCD PACK C.B.A. (VEP03691A) [Page: 3-76]
LUMINANCE & CHROMINANCE SEPARATION C.B.A. (VEP03639D) [Page: 3-74]
JOG SHUTTLE C.B.A. (VEP06597A) [Page: 3-120]
SECAM CHROMINANCE C.B.A. (VEP03744A) [Page: 3-85]
S-VHS TERMINAL C.B.A. [Page: 3-76] (VEP00P38B)
1H DELAY CCD PACK C.B.A. (VEP03680A) [Page: 3-68]
SUB LUMINANCE & CHROMINANCE C.B (VEP03677A) [Page
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12


NE
ACK
9A)
21]
AC HEAD
⚠ AUDIO POWER C.B.A. (VEP01397A) [Page: 3-100]
HEAD AMP C.B.A. (VEP05149A) [Page: 3-94]
CYLINDER DRIVE C.B.A. (VEP00P23B) [Page: 3-43]
PHOTO TR.(T) C.B.A. [Page: 3-24]
PHOTO TR.(S) C.B.A. (VEK3578) [Page: 3-23]
⚠ CAPSTAN MOTOR
M
FE HEAD C.B.A. (VEP00K88C) [Page: 3-24]
⚠TV DEMODULATOR PACK C.B.A. (VEP07693A) [Page: 3-108]
⚠ SIF PACK C.B.A. (VEP07698A) [Page: 3-111]
⚠ RF CONVERTER UNIT (ENC17960) [Page: 3-113]
DDR SECAM PACK C.B.A. (VEP03673B) [Page: 3-53]
LUMINANCE & CHROMINANCE PACK C.B.A. (VEP03634D) [Page: 3-52]
HQ PACK C.B.A. (VEP03635C) [Page: 3-62]
SERVO PACK C.B.A. (VEP02341A) [Page: 3-40]
FG AMP C.B.A. (VEP00M86A) [Page: 3-42]
⚠
REV MOTOR
MECHANISM CONNECTION C.B.A. (VXA3825) [Page: 3-23]
TO MODE SW
TO REV DET.SW
TO SAFETY TAB SW
TO SENSOR LED
TO SOLENOID
TO S-VHS CASSETTE SW
INPUT/OUTPUT PACK C.B.A.(VEP03642A) [Page: 3-90]
ANSCODER C.B.A.
'age: 3-82]
AM
OMINANCE
.A.
'03744A)
e: 3-85]
CCD PACK C.B.A. (VEP03691A) [Page: 3-76]
LUMINANCE & CHROMINANCE SEPARATION C.B.A. (VEP03639D) [Page: 3-74]
S-VHS TERMINAL C.B.A. [Page: 3-76] (VEP00P38B)
1H DELAY CCD PACK C.B.A. (VEP03680A) [Page: 3-68]
SUB LUMINANCE & CHROMINANCE C.B.A. (VEP03677A) [Page: 3-66]
⚠ POWER C.B.A. (VEP01381H) [Page: 3-29]
6
7
8
9
10
11
12
13
14
15
16
17

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

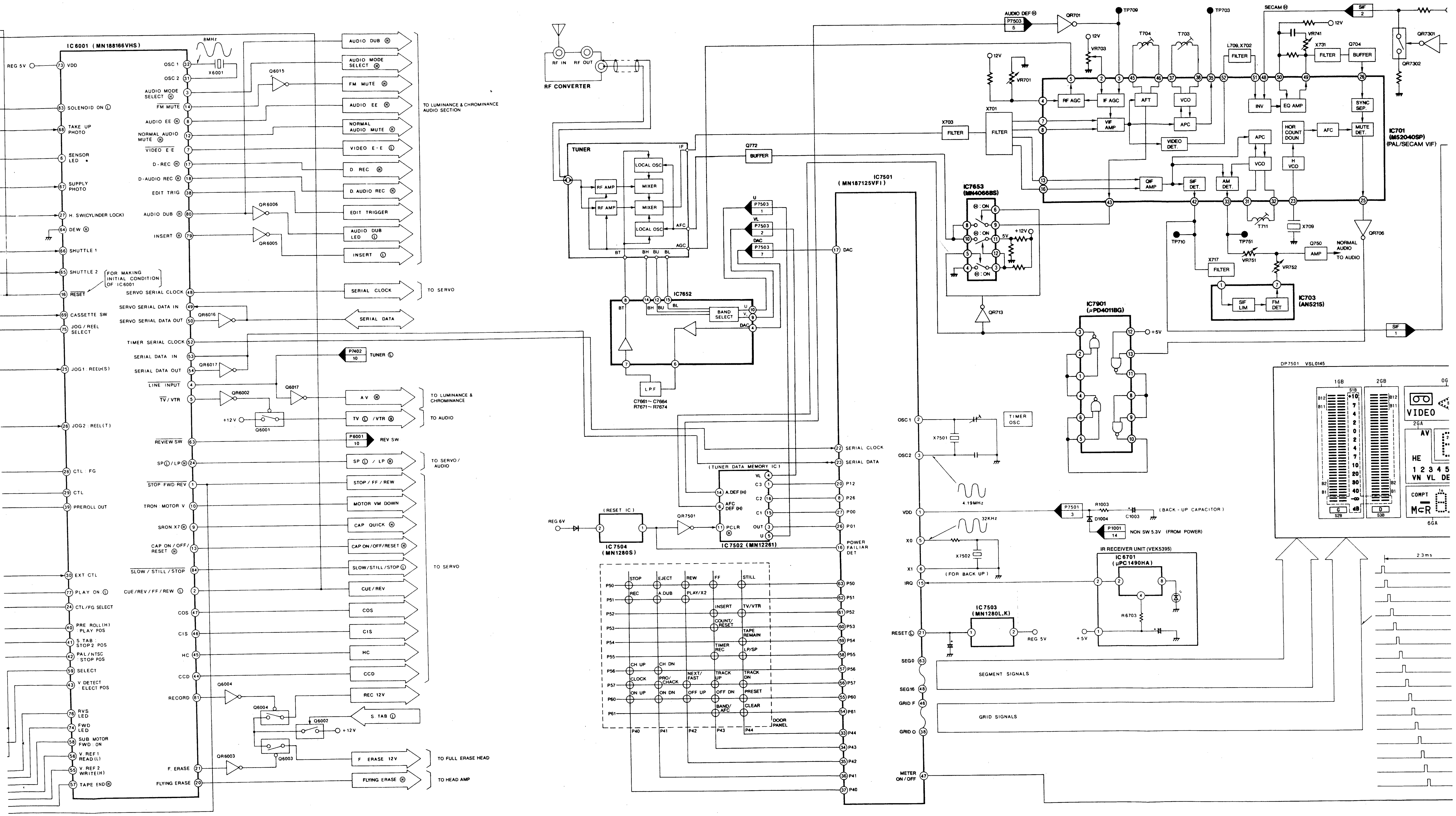
IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

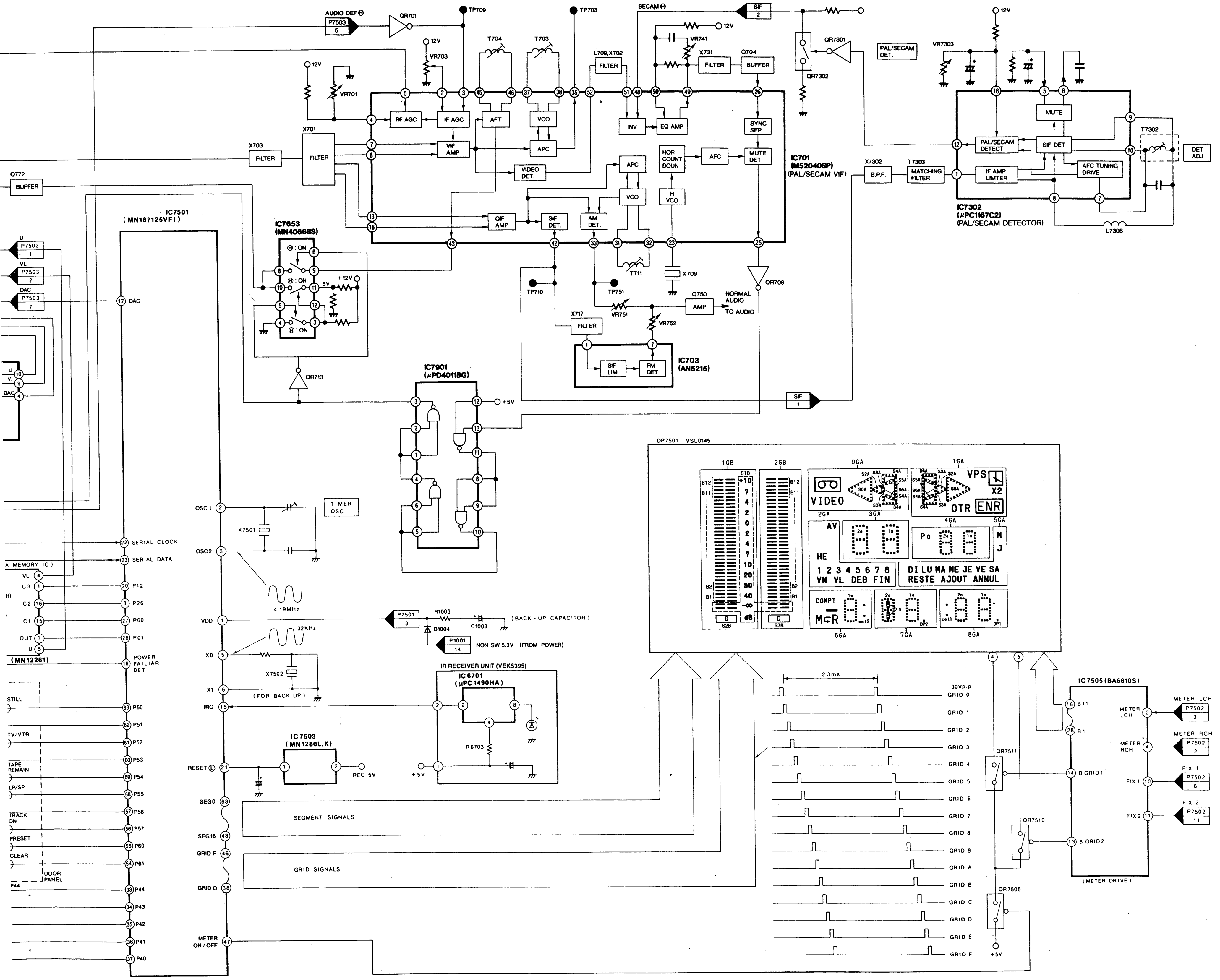
3-2. SYSTEM CONTROL BLOCK DIAGRAM


JOG / SHUTTLE
JOG
SHUTTLE
MODE DETECTOR
HALL ELEMENT
STATOR TERMINAL
ROTOR
BIT 0
BIT 1
BIT 2
BIT 3
BIT 4
JOG LED
PB 5V
JOG 2
JOG 1
R6702 ~ R6714
RESISTOR NETWORK
RVS LED
P7404 6
QR6011
FWD LED
P7404 8
QR6008
+5V
QR6010
QR6009
STILL Ⓛ
P7404 7
QR6007
REV MOTOR (+)
REV MOTOR (−)
M
IC 6005 (AN6609)
Q1
Q2
Q3
Q4
DRIVE MODE LOGIC
UNREG 14V
UNREG 45V
Q6011
QR6027
Q6025
Q6015
SOLENOID
P6001 6
UNREG 14V
P6001 4
Q6006, Q6007
QR6022
RESET : ON
QR6021
CUE/REV/FF/REW : ON
QR6013
+5V
TAKE UP PHOTO TR
P6002 1
P6001 15
Q6006 BUFFER
QR6014 AMP
SUPPLY PHOTO TR
P6002 2
H. SW
RESET PULSE
P7404 1
P7404 2
CASSETTE SW MOVING CONTACT
P6002 4
P6002 3
2.2K
IC6004 (MN1280R)
(RESET IC)
REG 5V
QR6018
IC 6004 (μPC339C)
V ref
SUPPLY REEL (8 SECTORS)
TAKE UP REEL (8 SECTORS)
JOG 2 P7404 5
REEL PULSE (S) P6001 13
JOG 1 P7404 4
REEL PULSE (T) P6001 9
PHOTO SENSOR +B P6001 12
+B
TO I/O
PREROLL Ⓗ
CTL
FG
+B
+5V
IC 6006 (LM393P)
Q6014
QR6020
IC 6003
(IC6003 : MC14011BCP)
R/S/F
P6001 11
S-TAB
PLAY POS P6001 1
STOP2 POS P6001 8
STOP POS P6001 7
EJECT POS P6001 5
IC6007 (MC14519BCP)
QR6019
IC 6001 (MN188166VHS)
REG 5V
73 VDD
83 SOLENOID ON Ⓛ
68 TAKE UP PHOTO
6 SENSOR LED
67 SUPPLY PHOTO
27 H. SW(CYLINDER LOCK)
64 DEW Ⓗ
66 SHUTTLE 1
65 SHUTTLE 2
FOR MAKING INITIAL CONDITION OF IC6001
16 RESET
69 CASSETTE SW
75 JOG / REEL SELECT
25 JOG1 : REEL(S)
26 JOG2 : REEL(T)
28 CTL : FG
29 CTL
39 PREROLL OUT
30 EXT CTL
77 PLAY ON Ⓛ
24 CTL/FG SELECT
40 PRE ROLL (H) : PLAY POS
41 S. TAB : STOP2 POS
42 PAL/NTSC : STOP POS
59 SELECT
43 V DETECT : ELECT POS
76 RVS LED
74 FWD LED
58 SUB MOTOR FWD : ON
56 V. REF 1 READ (L)
55 V. REF 2 WRITE (H)
57 TAPE END Ⓗ
8MHz
OSC 1 32
OSC 2 31
X6001
AUDIO MODE SELECT Ⓗ 3
FM MUTE 14
AUDIO EE Ⓗ 8
NORMAL AUDIO MUTE Ⓗ 12
VIDEO E-E 7
D-REC Ⓗ 17
D-AUDIO REC Ⓗ 18
EDIT TRIG 38
AUDIO DUB Ⓗ 80
INSERT Ⓗ 79
SERVO SERIAL CLOCK 48
SERVO SERIAL DATA IN 49
SERVO SERIAL DATA OUT 50
TIMER SERIAL CLOCK 52
SERIAL DATA IN 53
SERIAL DATA OUT 54
LINE INPUT 4
TV / VTR 5
REVIEW SW 63
SP Ⓛ / LP Ⓗ 24
STOP FWD REV 1
TRON : MOTOR V 10
SRON : X7 Ⓗ 9
CAP ON / OFF / RESET Ⓗ 13
SLOW / STILL / STOP 84
CUE / REV / FF / REW Ⓛ 2
COS 47
CIS 46
HC 45
CCD 44
RECORD 81
F. ERASE 21
FLYING ERASE 20
Q6015
QR6006
QR6005
QR6016
QR6017
Q6017
QR6002
+12V
Q6001
Q6004
Q6002
Q6003
QR6003
AUDIO DUB Ⓗ
AUDIO MODE SELECT Ⓗ
FM MUTE Ⓗ
AUDIO EE Ⓗ
NORMAL AUDIO MUTE Ⓗ
VIDEO E-E Ⓛ
D. REC Ⓗ
D AUDIO REC Ⓗ
EDIT TRIGGER
AUDIO DUB LED Ⓛ
INSERT Ⓛ
TO LUMINANCE & CHROMINANCE AUDIO SECTION
SERIAL CLOCK
TO SERVO
SERIAL DATA
P7402 10
TUNER Ⓛ
AV Ⓗ
TO LUMINANCE & CHROMINANCE
TV Ⓛ / VTR Ⓗ
TO AUDIO
P6001 10
REV SW
SP Ⓛ / LP Ⓗ
TO SERVO / AUDIO
STOP / FF / REW
MOTOR VM DOWN
CAP QUICK Ⓗ
CAP ON/OFF/RESET Ⓗ
SLOW/STILL/STOP Ⓛ
CUE/REV
COS
CIS
HC
CCD
TO SERVO
REC 12V
S. TAB Ⓛ
F ERASE 12V
TO FULL ERASE HEAD
FLYING ERASE Ⓗ
TO HEAD AMP

MODE	REV			X 2	PLAY	SLOW					STILL	
SPEED	X 9	X 7	X 5	X 2	1	1/5	1/7	1/10	1/20	1/30		
SHUTTLE 2	2.0	2.5	2.5	2.0	2.0	2.5	2.5	2.0	2.0	2.5	2.5	3.2
SHUTTLE 1	0	0	0.6	0.6	3.1	3.1	2.4	2.4	3.7	3.7	4.4	4.4
MODE	SLOW					PLAY	X 2	CUE				
SPEED	1/30	1/20	1/10	1/7	1/5	1	X 2	X 5	X 7	X 9		
SHUTTLE 2	3.2	5.0	5.0	3.2	3.2	5.0	5.0	3.2	3.2	5.0		
SHUTTLE 1	3.7	3.7	2.4	2.4	3.1	3.1	0.6	0.6	0	0		

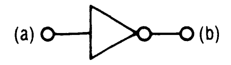
IC6005 PIN NO / MODE	IC 6005			MOTOR DIRECTION
	14	15	16	
REV	L	L	H	FWD
SWITCH OVER TO FF / REW	L	H	L	RVS
RVS SLOW	H	L	H	FWD
REWIND	L	H	H	RVS
BREAK	H	H	L	STOP


IC6001 (MN188166VHS)
REG 5V
VDD
SOLENOID ON Ⓛ
TAKE UP PHOTO
SENSOR LED
SUPPLY PHOTO
H. SW(CYLINDER LOCK)
DEW Ⓗ
SHUTTLE 1
SHUTTLE 2
FOR MAKING INITIAL CONDITION OF IC6001
RESET
CASSETTE SW
JOG / REEL SELECT
JOG1 REEL(S)
JOG2 REEL(T)
CTL FG
CTL
PREROLL OUT
EXT CTL
PLAY ON Ⓛ
CTL/FG SELECT
PRE ROLL(H) PLAY POS
S.TAB STOP2 POS
PAL / NTSC STOP POS
SELECT
V DETECT ELECT POS
RVS LED
FWD LED
SUB MOTOR FWD ON
V. REF 1 READ (L)
V. REF 2 WRITE(H)
TAPE END Ⓗ
8MHz
OSC 1
OSC 2
X6001
Q6015
AUDIO MODE SELECT Ⓗ
FM MUTE
AUDIO EE Ⓗ
NORMAL AUDIO MUTE Ⓗ
VIDEO E·E
D-REC Ⓗ
D-AUDIO REC Ⓗ
EDIT TRIG
AUDIO DUB Ⓗ
INSERT Ⓗ
QR6006
QR6005
SERVO SERIAL CLOCK
SERVO SERIAL DATA IN
SERVO SERIAL DATA OUT
QR6016
TIMER SERIAL CLOCK
SERIAL DATA IN
SERIAL DATA OUT
QR6017
LINE INPUT
TV / VTR
QR6002
Q6017
+12V
Q6001
REVIEW SW
SPⓁ/LPⒽ
STOP FWD REV
TRON MOTOR V
SRON.X7 Ⓗ
CAP ON / OFF / RESET Ⓗ
SLOW / STILL / STOP
CUE / REV / FF / REW Ⓛ
COS
CIS
HC
CCD
RECORD
Q6004
Q6002
F. ERASE
FLYING ERASE
QR6003
Q6003
AUDIO DUB Ⓗ
AUDIO MODE SELECT Ⓗ
FM MUTE Ⓗ
AUDIO EE Ⓗ
NORMAL AUDIO MUTE Ⓗ
VIDEO E-E Ⓛ
D REC Ⓗ
D AUDIO REC Ⓗ
EDIT TRIGGER
AUDIO DUB LED Ⓛ
INSERT Ⓛ
TO LUMINANCE & CHROMINANCE AUDIO SECTION
SERIAL CLOCK
TO SERVO
SERIAL DATA
P7402 10
TUNER Ⓛ
AV Ⓗ
TO LUMINANCE & CHROMINANCE
TV Ⓛ / VTR Ⓗ
TO AUDIO
P6001 10
REV SW
SP Ⓛ / LP Ⓗ
TO SERVO / AUDIO
STOP / FF / REW
MOTOR VM DOWN
CAP QUICK Ⓗ
CAP ON/OFF/RESET Ⓗ
SLOW/STILL/STOP Ⓛ
CUE / REV
COS
CIS
HC
CCD
TO SERVO
REC 12V
S. TAB Ⓛ
+12V
F ERASE 12V
TO FULL ERASE HEAD
FLYING ERASE
TO HEAD AMP
RF IN
RF OUT
RF CONVERTER
TUNER
IF
RF AMP
LOCAL OSC
MIXER
AFC
AGC
BT
BH
BU
BL
Q772
BUFFER
IC7652
BAND SELECT
DAC
LPF
C7661 ~ C7664
R7671 ~ R7674
P7503
U
VL
DAC
IC7501 (MN187125VFI)
SERIAL CLOCK
SERIAL DATA
(TUNER DATA MEMORY IC)
A.DEF (H)
AFC DEF (H)
PCLR
IC7502 (MN12261)
P12
P26
P00
P01
POWER FAILIAR DET
REG 6V
(RESET IC)
IC7504 (MN1280S)
QR7501
OSC1
OSC2
X7501
TIMER OSC
4.19MHz
VDD
P7501 3
R1003
D1004
C1003
(BACK-UP CAPACITOR)
P1001 14
NON SW 5.3V (FROM POWER)
X0
32KHz
X7502
X1
(FOR BACK UP)
IRQ
IR RECEIVER UNIT (VEK5395)
IC6701 (μPC1490HA)
R6703
+5V
RESET Ⓛ
IC7503 (MN1280L,K)
REG 5V
SEG0
SEG16
GRID F
GRID 0
SEGMENT SIGNALS
GRID SIGNALS
METER ON / OFF
STOP
EJECT
REW
FF
STILL
REC
A.DUB
PLAY/X2
INSERT
TV/VTR
COUNT/ RESET
TAPE REMAIN
TIMER REC
LP/SP
CH UP
CH DN
CLOCK
PRO/ CHACK
NEXT/ FAST
TRACK UP
TRACK DN
ON UP
ON DN
OFF UP
OFF DN
PRESET
BAND/ AFC
CLEAR
DOOR PANEL
P50
P51
P52
P53
P54
P55
P56
P57
P60
P61
P40
P41
P42
P43
P44
AUDIO DEF Ⓗ
P7503 5
QR701
TP709
TP703
SECAM Ⓗ
SIF 2
QR7301
QR7302
12V
VR703
VR701
VR741
X731
Q704
T704
T703
L709,X702
FILTER
BUFFER
RF AGC
IF AGC
AFT
VCO
INV
EQ AMP
SYNC SEP.
X703
X701
FILTER
VIF AMP
APC
VIDEO DET.
HOR COUNT DOUN
AFC
MUTE DET.
H VCO
IC701 (M52040SP) (PAL/SECAM VIF)
QIF AMP
SIF DET.
AM DET.
T711
X709
IC7653 (MN4066BS)
Ⓗ:ON
TP710
TP751
VR751
VR752
Q750
AMP
NORMAL AUDIO
TO AUDIO
QR706
QR713
X717
SIF LIM
FM DET
IC703 (AN5215)
IC7901 (μPD4011BG)
+5V
SIF 1
DP7501 VSL0145
1GB
2GB
0G
S1B
B12
B11
B2
B1
S2B
S3B
VIDEO
2GA
AV
HE
1 2 3 4 5
VN VL DE
COMPT
M⊂R
6GA
2.3ms


IC701 (M52040SP) (PAL/SECAM VIF)
IC7302 (μPC1167C2) (PAL/SECAM DETECTOR)
IC7653 (MN4066BS)
IC7901 (μPD4011BG)
IC703 (AN5215)
IC7501 (MN187125VFI)
IC7503 (MN1280L,K)
IC6701 (μPC1490HA)
IR RECEIVER UNIT (VEK5395)
IC7505 (BA6810S)
(METER DRIVE)
DP7501 VSL0145
RF AGC
IF AGC
AFT
VCO
VIF AMP
APC
VIDEO DET.
INV
EQ AMP
SYNC SEP.
MUTE DET.
HOR COUNT DOUN
AFC
H VCO
QIF AMP
SIF DET.
AM DET.
FILTER
BUFFER
SIF LIM
FM DET
MUTE
PAL/SECAM DETECT
SIF DET
IF AMP LIMTER
AFC TUNING DRIVE
MATCHING FILTER
B.P.F.
PAL/SECAM DET.
DET ADJ
AUDIO DEF
SECAM
SIF 1
SIF 2
NORMAL AUDIO TO AUDIO
TIMER OSC
4.19MHz
32KHz
(FOR BACK UP)
(BACK - UP CAPACITOR)
NON SW 5.3V (FROM POWER)
REG 5V
SERIAL CLOCK
SERIAL DATA
POWER FAILIAR DET
SEGMENT SIGNALS
GRID SIGNALS
METER ON/OFF
METER LCH
METER RCH
FIX 1
FIX 2
2.3ms
30Vp-p
GRID 0
GRID 1
GRID 2
GRID 3
GRID 4
GRID 5
GRID 6
GRID 7
GRID 8
GRID 9
GRID A
GRID B
GRID C
GRID D
GRID E
GRID F
VIDEO
VPS
X2
OTR
ENR
AV
HE
1 2 3 4 5 6 7 8
VN VL DEB FIN
DI LU MA ME JE VE SA
RESTE AJOUT ANNUL
COMPT
M<R
STILL
TV/VTR
TAPE REMAIN
LP/SP
TRACK ON
PRESET
CLEAR
DOOR PANEL
(MN12261)

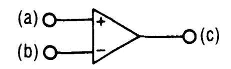
SYMBOL	TRUTH VALUE TABLE
INVERTER	
COMPARTOR	
AND CIRCUIT	
OR CIRCUIT	
THREE STATES BUFFER	
TR. SW (NPN TYPE)	
TR. SW (PNP TYPE)	
R-S TYPE FLIP-FLOP	

INVERTER



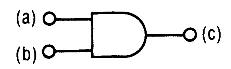
IN	(a)	H	L
OUT	(b)	L	H

COMPARTOR



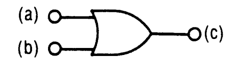
IN	(a) (b)	(a)>(b)	(a)<(b)
OUT	(c)	H	L

AND CIRCUIT



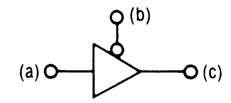
IN	(a)	L	L	H	H
	(b)	L	H	L	H
OUT	(c)	L	L	L	H

OR CIRCUIT



IN	(a)	L	L	H	H
	(b)	L	H	L	H
OUT	(c)	L	H	H	H

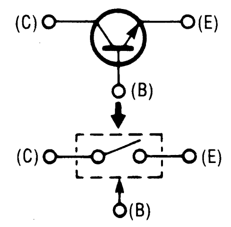
THREE STATES BUFFER



IN	(a)	H	L	H or L
	(b)	L	L	H
OUT	(c)	H	L	※

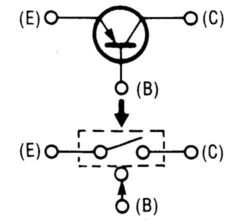
※ High Impedance

TR. SW (NPN TYPE)



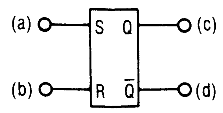
BASE	H	L
TR. SW	ON	OFF

TR. SW (PNP TYPE)



BASE	H	L
TR. SW	OFF	ON

R-S TYPE FLIP-FLOP

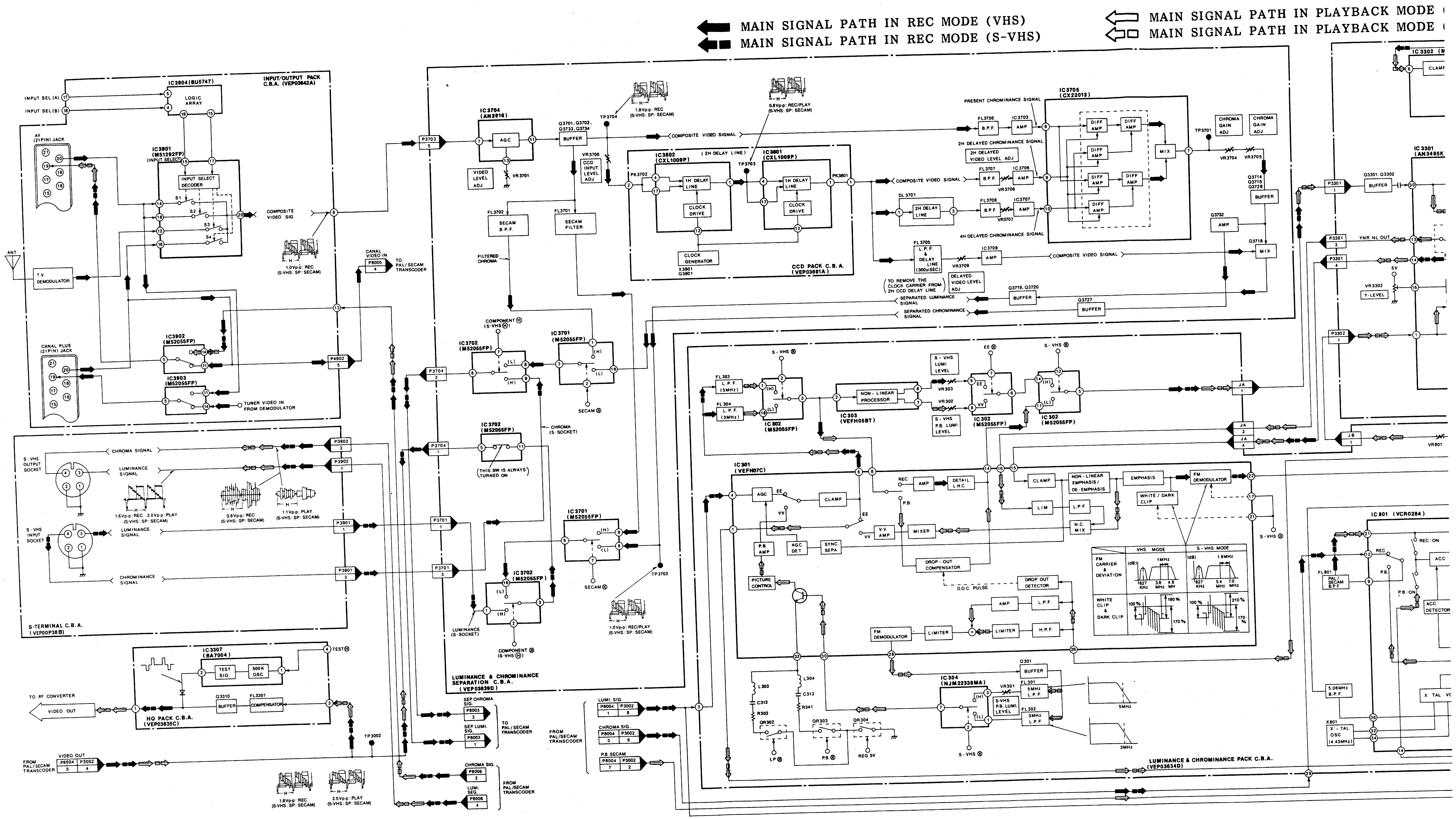


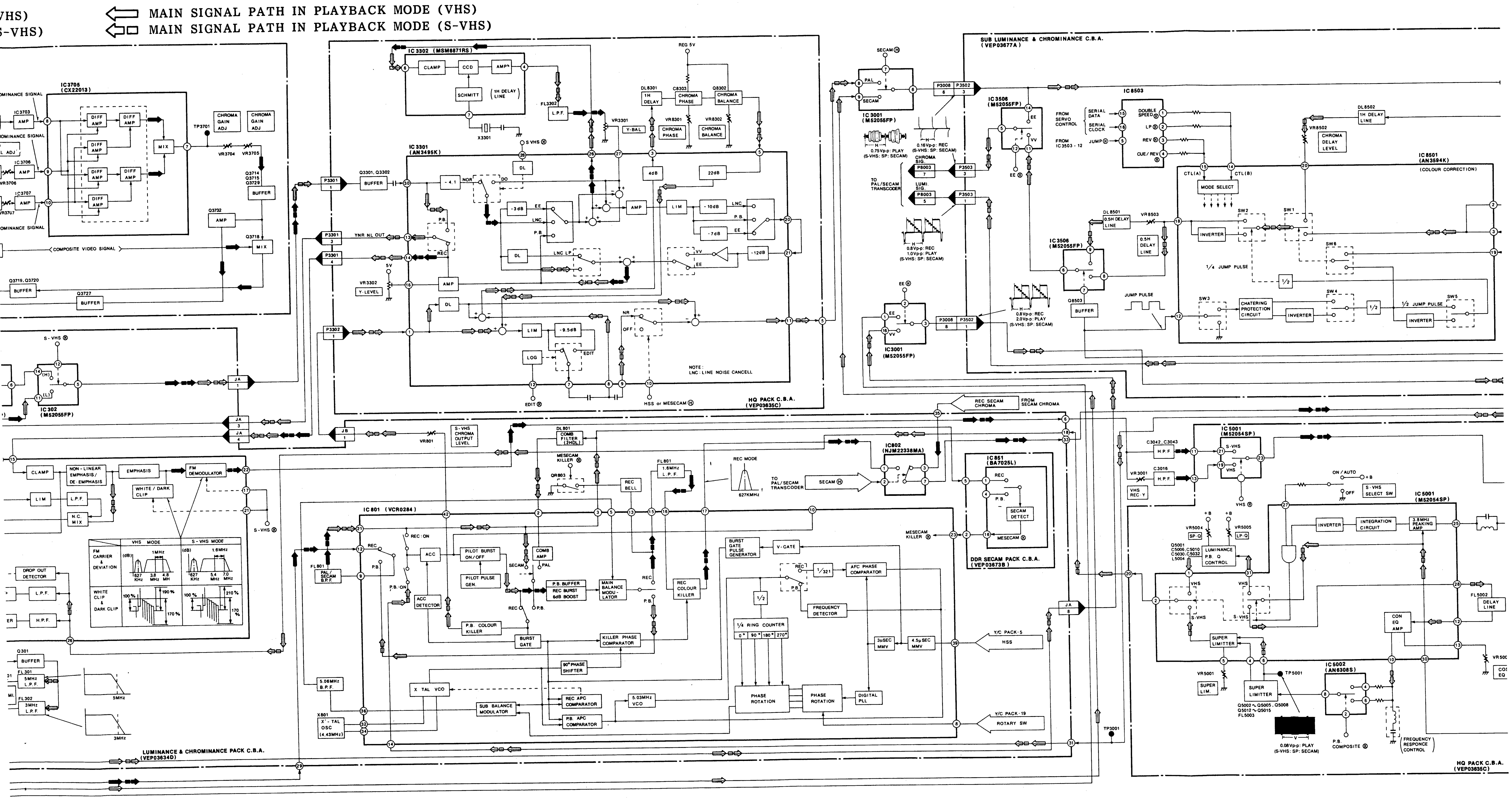
IN	(a)	L	L	⎍
	(b)	L	⎍	L
OUT	(c)	※	L	H
	(d)	◆	H	L

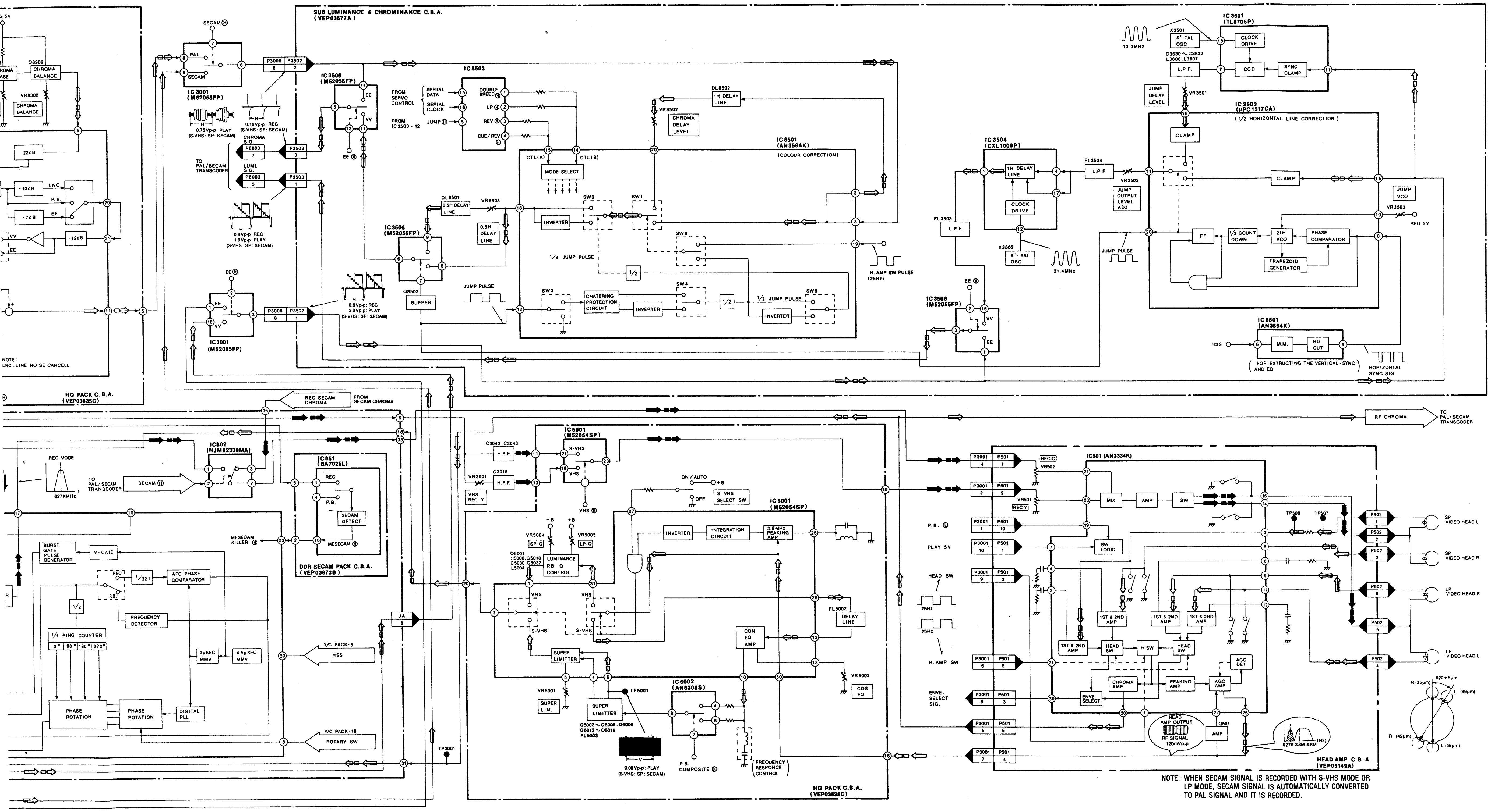
※ Initial condition is maintained.
◆ Initial condition is reverced.

Next Page:
LUMINANCE & CHROMINANCE Section

3-3. LUMINANCE & CHROMINANCE BLOCK DIAGRAM


MAIN SIGNAL PATH IN REC MODE (VHS)
MAIN SIGNAL PATH IN REC MODE (S-VHS)
MAIN SIGNAL PATH IN PLAYBACK MODE
MAIN SIGNAL PATH IN PLAYBACK MODE
INPUT/OUTPUT PACK C.B.A. (VEP03642A)
IC3904 (BU5747)
LOGIC ARRAY
INPUT SEL (A)
INPUT SEL (B)
AV (21PIN) JACK
IC3901 (M51292FP) (INPUT SELECT)
INPUT SELECT DECODER
COMPOSITE VIDEO SIG
ANT
T.V. DEMODULATOR
1.0Vp-p: REC (S-VHS: SP: SECAM)
CANAL VIDEO IN P8005
TO PAL/SECAM TRANSCODER
CANAL PLUS (21PIN) JACK
IC3902 (M52055FP)
IC3903 (M52055FP)
P4902
TUNER VIDEO IN FROM DEMODULATOR
S-VHS OUTPUT SOCKET
CHROMA SIGNAL
LUMINANCE SIGNAL
S-VHS INPUT SOCKET
CHROMINANCE SIGNAL
1.6Vp-p: REC 2.0Vp-p: PLAY (S-VHS: SP: SECAM)
0.8Vp-p: REC (S-VHS: SP: SECAM)
1.1Vp-p: PLAY (S-VHS: SP: SECAM)
S-TERMINAL C.B.A. (VEP00P38B)
IC3307 (BA7004)
TEST SIG.
500K OSC
TEST Ⓗ
TO RF CONVERTER
VIDEO OUT
Q3310 BUFFER
FL3301 COMPENSATOR
HQ PACK C.B.A. (VEP03635C)
TP3002
FROM PAL/SECAM TRANSCODER
VIDEO OUT P8004 P3002
1.8Vp-p: REC (S-VHS: SP: SECAM)
2.5Vp-p: PLAY (S-VHS: SP: SECAM)
IC3704 (AN3916)
AGC
VIDEO LEVEL ADJ
VR3701
Q3701, Q3702, Q3733, Q3734 BUFFER
TP3704
1.9Vp-p: REC (S-VHS: SP: SECAM)
0.8Vp-p: REC/PLAY (S-VHS: SP: SECAM)
COMPOSITE VIDEO SIGNAL
VR3708 CCD INPUT LEVEL ADJ
IC3802 (CXL1009P)
(2H DELAY LINE)
IC3801 (CXL1009P)
1H DELAY LINE
CLOCK DRIVE
CLOCK GENERATOR X3801 Q3801
CCD PACK C.B.A. (VEP03691A)
FL3702 SECAM B.P.F.
FL3701 SECAM FILTER
FILTERED CHROMA
TP3703
PRESENT CHROMINANCE SIGNAL
IC3705 (CX22013)
FL3706 B.P.F.
IC3703 AMP
2H DELAYED CHROMINANCE SIGNAL
2H DELAYED VIDEO LEVEL ADJ
FL3707 B.P.F. IC3706 AMP VR3706
DL3701 2H DELAY LINE
FL3708 B.P.F. IC3707 AMP VR3707
4H DELAYED CHROMINANCE SIGNAL
DIFF AMP
MIX
CHROMA GAIN ADJ
TP3701
VR3704 VR3705
Q3714 Q3715 Q3729 BUFFER
Q3732 AMP
Q3718 MIX
FL3705 L.P.F. & DELAY LINE (300µSEC)
VR3709
IC3708 AMP
DELAYED VIDEO LEVEL ADJ
(TO REMOVE THE CLOCK CARRIER FROM 2H CCD DELAY LINE)
SEPARATED LUMINANCE SIGNAL
SEPARATED CHROMINANCE SIGNAL
Q3719, Q3720 BUFFER
Q3727 BUFFER
COMPONENT Ⓗ (S-VHS Ⓗ)
IC3702 (M52055FP)
IC3701 (M52055FP)
SECAM Ⓗ
CHROMA (S-SOCKET)
(THIS SW IS ALWAYS TURNED ON)
P3704
P3701
P3703
LUMINANCE (S-SOCKET)
COMPONENT Ⓗ (S-VHS Ⓗ)
TP3702
1.0Vp-p: REC/PLAY (S-VHS: SP: SECAM)
LUMINANCE & CHROMINANCE SEPARATION C.B.A. (VEP03639D)
SEP.CHROMA SIG. P8003
SEP.LUMI. SIG. P8003
TO PAL/SECAM TRANSCODER
CHROMA SIG. P8006
LUMI. SIG. P8006
FROM PAL/SECAM TRANSCODER
LUMI. SIG. P8004 P3002
CHROMA SIG. P8004 P3002
P.B SECAM P8004 P3002
S-VHS Ⓗ
FL303 L.P.F. (5MHz)
FL304 L.P.F. (3MHz)
IC302 (M52055FP)
IC303 (VEFH05BT)
NON-LINEAR PROCESSOR
S-VHS LUMI LEVEL VR303
VR302 S-VHS P.B. LUMI LEVEL
EE Ⓗ
JA
JB
IC301 (VEFH07C)
AGC
CLAMP
REC AMP
DETAIL L.N.C
P.B.
V.V AMP
MIXER
DROP-OUT COMPENSATOR
D.O.C. PULSE
DROP OUT DETECTOR
P.B. AMP
AGC DET
SYNC SEPA
PICTURE CONTROL
NON-LINEAR EMPHASIS/DE-EMPHASIS
EMPHASIS
FM MODULATOR
WHITE/DARK CLIP
LIM
L.P.F.
N.C. MIX
AMP
H.P.F.
LIMITER
FM DEMODULATOR
FM CARRIER & DEVIATION
VHS MODE
S-VHS MODE
WHITE CLIP & DARK CLIP
L303 C313 R302
L304 C312 R341
QR302 QR303 QR304
LP Ⓗ
P.B. Ⓗ
REG 5V
IC304 (NJM2238MA)
Q301 BUFFER
VR301 S-VHS P.B. LUMI. LEVEL
FL301 5MHz L.P.F.
FL302 3MHz L.P.F.
5MHz
3MHz
LUMINANCE & CHROMINANCE PACK C.B.A. (VEP03634D)
IC3302
IC3301 (AN3495K
P3301
Q3301, Q3302 BUFFER
YNR NL OUT
VR3302 Y-LEVEL
P3302
VR801
IC801 (VCR0284)
REC ON
ACC
ACC DETECTOR
FL801 PAL/SECAM B.P.F.
5.06MHz B.P.F.
X801 X'-TAL OSC (4.43MHz)
X TAL

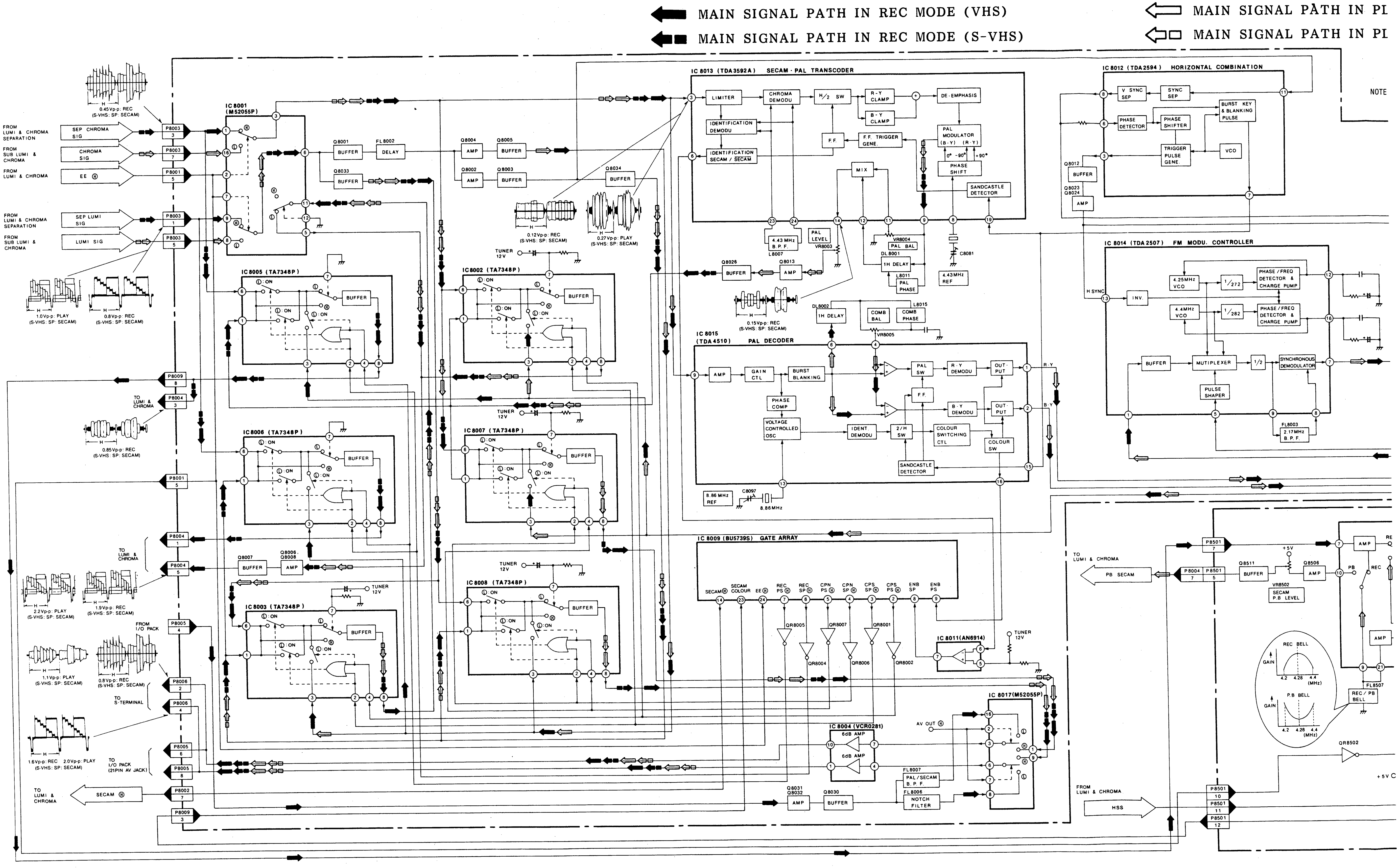

VHS)
-VHS)
MAIN SIGNAL PATH IN PLAYBACK MODE (VHS)
MAIN SIGNAL PATH IN PLAYBACK MODE (S-VHS)
IC3705 (CX22013)
IC3703
IC3706
IC3707
DIFF AMP
MIX
AMP
TP3701
VR3704
VR3705
CHROMA GAIN ADJ
Q3714 Q3715 Q3729
BUFFER
Q3732
Q3718
COMPOSITE VIDEO SIGNAL
Q3719, Q3720
Q3727
IC302 (M52055FP)
S-VHS Ⓗ
IC3302 (MSM6871RS)
CLAMP
CCD
AMP
SCHMITT
(1H DELAY LINE)
X3301
FL3302
L.P.F.
VR3301
Y-BAL
REG 5V
DL8301 1H DELAY
C8303 CHROMA PHASE
Q8302 CHROMA BALANCE
VR8301
VR8302
IC3301 (AN3495K)
S VHS Ⓗ
Q3301, Q3302
P3301
NOR
DO
-3dB
EE
LNC
P.B.
LIM
-10dB
-7dB
4dB
22dB
DL
LNC LP
VV
-12dB
YNR NL OUT
REC
5V
VR3302
Y-LEVEL
P3302
-9.5dB
LOG
EDIT
NR
OFF
NOTE: LNC: LINE NOISE CANCELL
EDIT Ⓗ
HSS or MESECAM Ⓗ
HQ PACK C.B.A. (VEP03635C)
JA
JB
VR801
S-VHS CHROMA OUTPUT LEVEL
DL801 COMB FILTER (2HDL)
MESECAM KILLER Ⓗ
QR803
REC BELL
FL801 1.6MHz L.P.F.
REC MODE
627KMHz
TO PAL/SECAM TRANSCODER
SECAM Ⓗ
IC802 (NJM22338MA)
IC851 (BA7025L)
SECAM DETECT
MESECAM Ⓗ
DDR SECAM PACK C.B.A. (VEP03673B)
REC SECAM CHROMA
FROM SECAM CHROMA
CLAMP
NON-LINEAR EMPHASIS/DE-EMPHASIS
EMPHASIS
FM DEMODULATOR
WHITE/DARK CLIP
LIM
L.P.F.
N.C. MIX
DROP OUT DETECTOR
H.P.F.
VHS MODE
S-VHS MODE
FM CARRIER & DEVIATION
WHITE CLIP & DARK CLIP
Q301 BUFFER
FL301 5MHz L.P.F.
FL302 3MHz L.P.F.
5MHz
3MHz
IC801 (VCR0284)
REC: ON
ACC
PILOT BURST ON/OFF
PILOT PULSE GEN.
COMB AMP
SECAM
PAL
P.B. BUFFER REC BURST 6dB BOOST
MAIN BALANCE MODULATOR
REC COLOUR KILLER
ACC DETECTOR
P.B. COLOUR KILLER
BURST GATE
KILLER PHASE COMPARATOR
90° PHASE SHIFTER
BURST GATE PULSE GENERATOR
V-GATE
1/321
AFC PHASE COMPARATOR
FREQUENCY DETECTOR
1/2
1/4 RING COUNTER
3μSEC MMV
4.5μSEC MMV
PHASE ROTATION
DIGITAL PLL
FL801 PAL/SECAM B.P.F.
5.06MHz B.P.F.
X TAL VCO
SUB BALANCE MODULATOR
REC APC COMPARATOR
P.B. APC COMPARATOR
5.03MHz VCO
X801 X'-TAL OSC (4.43MHz)
Y/C PACK-5 HSS
Y/C PACK-19 ROTARY SW
LUMINANCE & CHROMINANCE PACK C.B.A. (VEP03634D)
SECAM Ⓗ
PAL
IC3001 (M52055FP)
P3008
P3502
0.75Vp-p: PLAY (S-VHS: SP: SECAM)
0.16Vp-p: REC (S-VHS: SP: SECAM)
CHROMA SIG.
P8003
P3503
TO PAL/SECAM TRANSCODER
LUMI. SIG.
0.8Vp-p: REC 1.0Vp-p: PLAY (S-VHS: SP: SECAM)
EE Ⓗ
0.8Vp-p: REC 2.0Vp-p: PLAY (S-VHS: SP: SECAM)
SUB LUMINANCE & CHROMINANCE C.B.A. (VEP03677A)
IC3506 (M52055FP)
FROM SERVO CONTROL
SERIAL DATA
SERIAL CLOCK
FROM IC3503-12
JUMP
IC8503
DOUBLE SPEED
LP
REV
CUE/REV
DL8502 1H DELAY LINE
VR8502
CHROMA DELAY LEVEL
IC8501 (AN3594K)
(COLOUR CORRECTION)
CTL(A)
CTL(B)
MODE SELECT
DL8501 0.5H DELAY LINE
VR8503
0.5H DELAY LINE
INVERTER
SW1
SW2
SW3
SW4
SW5
SW6
1/4 JUMP PULSE
1/2 JUMP PULSE
JUMP PULSE
Q8503 BUFFER
CHATERING PROTECTION CIRCUIT
IC5001 (M52054SP)
C3042, C3043
H.P.F.
VR3001
C3016
VHS REC·Y
VHS Ⓗ
ON/AUTO
OFF
S-VHS SELECT SW
INVERTER
INTEGRATION CIRCUIT
3.8MHz PEAKING AMP
VR5004
VR5005
SP·Q
LP·Q
Q5001 C5006, C5010 C5030, C5032 L5004
LUMINANCE P.B. Q CONTROL
FL5002 DELAY LINE
CON EQ AMP
SUPER LIMITTER
VR5001
SUPER LIM.
TP5001
IC5002 (AN6308S)
Q5002~Q5005, Q5008 Q5012~Q5015 FL5003
0.08Vp-p: PLAY (S-VHS: SP: SECAM)
P.B. COMPOSITE Ⓗ
FREQUENCY RESPONCE CONTROL
TP3001
VR500
HQ PACK C.B.A. (VEP03635C)



SUB LUMINANCE & CHROMINANCE C.B.A. (VEP03677A)
IC3001 (M52055FP)
SECAM Ⓗ
PAL
P3008
P3502
P8003
P3503
TO PAL/SECAM TRANSCODER
CHROMA SIG.
LUMI. SIG.
0.75Vp-p: PLAY (S-VHS: SP: SECAM)
0.16Vp-p: REC (S-VHS: SP: SECAM)
0.8Vp-p: REC 1.0Vp-p: PLAY (S-VHS: SP: SECAM)
0.8Vp-p: REC 2.0Vp-p: PLAY (S-VHS: SP: SECAM)
IC3506 (M52055FP)
IC8503
FROM SERVO CONTROL
SERIAL DATA
SERIAL CLOCK
FROM IC3503 - 12
JUMP
DOUBLE SPEED
LP
REV
CUE/REV
DL8502 1H DELAY LINE
VR8502
CHROMA DELAY LEVEL
IC8501 (AN3594K) (COLOUR CORRECTION)
CTL(A)
CTL(B)
MODE SELECT
DL8501 0.5H DELAY LINE
VR8503
INVERTER
SW1
SW2
SW3
SW4
SW5
SW6
1/4 JUMP PULSE
1/2 JUMP PULSE
JUMP PULSE
Q8503 BUFFER
CHATERING PROTECTION CIRCUIT
H. AMP SW PULSE (25Hz)
IC3504 (CXL1009P)
1H DELAY LINE
CLOCK DRIVE
X3502 X'-TAL OSC
21.4MHz
FL3503 L.P.F.
FL3504 L.P.F.
VR3503
JUMP OUTPUT LEVEL ADJ
IC3501 (TL8705P)
X3501 X'-TAL OSC
13.3MHz
C3630 ~ C3632 L3606, L3607
CLOCK DRIVE
CCD
SYNC CLAMP
JUMP DELAY LEVEL
VR3501
IC3503 (μPC1517CA) (1/2 HORIZONTAL LINE CORRECTION)
CLAMP
JUMP VCO
VR3502
REG 5V
FF
1/2 COUNT DOWN
2fH VCO
PHASE COMPARATOR
TRAPEZOID GENERATOR
IC8501 (AN3594K)
HSS
M.M.
HD OUT
(FOR EXTRUCTING THE VERTICAL-SYNC AND EQ)
HORIZONTAL SYNC SIG
HQ PACK C.B.A. (VEP03635C)
NOTE: LNC: LINE NOISE CANCELL
Q8302
CHROMA BALANCE
VR8302
22dB
-10dB
-7dB
-12dB
LNC
P.B.
EE
REC SECAM CHROMA
FROM SECAM CHROMA
REC MODE
627KMHz
IC802 (NJM22338MA)
SECAM Ⓗ
IC851 (BA7025L)
SECAM DETECT
MESECAM Ⓗ
MESECAM KILLER Ⓗ
DDR SECAM PACK C.B.A. (VEP03673B)
BURST GATE PULSE GENERATOR
V-GATE
1/321
AFC PHASE COMPARATOR
FREQUENCY DETECTOR
1/4 RING COUNTER
0° 90° 180° 270°
3μSEC MMV
4.5μSEC MMV
PHASE ROTATION
DIGITAL PLL
Y/C PACK-5 HSS
Y/C PACK-19 ROTARY SW
TP3001
IC5001 (M52054SP)
C3042, C3043 H.P.F.
C3016 H.P.F.
VR3001
VHS REC-Y
S-VHS
VHS
VHS Ⓗ
ON/AUTO
OFF
S-VHS SELECT SW
VR5004 SP-Q
VR5005 LP-Q
Q5001 C5006, C5010 C5030, C5032 L5004
LUMINANCE P.B. Q CONTROL
INTEGRATION CIRCUIT
3.8MHz PEAKING AMP
FL5002 DELAY LINE
CON EQ AMP
COS EQ
VR5002
SUPER LIMITTER
VR5001
SUPER LIM.
TP5001
Q5002 ~ Q5005, Q5008 Q5012 ~ Q5015 FL5003
IC5002 (AN6308S)
0.06Vp-p: PLAY (S-VHS: SP: SECAM)
P.B. COMPOSITE Ⓗ
FREQUENCY RESPONCE CONTROL
HQ PACK C.B.A. (VEP03635C)
RF CHROMA
TO PAL/SECAM TRANSCODER
P3001
P501
REC-C
VR502
VR501
REC-Y
IC501 (AN3334K)
MIX
AMP
SW
P.B. Ⓛ
PLAY 5V
HEAD SW
25Hz
H. AMP SW
ENVE. SELECT SIG.
SW LOGIC
1ST & 2ND AMP
HEAD SW
H SW
CHROMA AMP
PEAKING AMP
AGC AMP
AGC DET
ENVE SELECT
HEAD AMP OUTPUT RF SIGNAL 120mVp-p
Q501 AMP
627K 3.8M 4.8M (Hz)
TP508
TP507
P502
SP VIDEO HEAD L
SP VIDEO HEAD R
LP VIDEO HEAD R
LP VIDEO HEAD L
R (35μm)
L (49μm)
620±5μm
R (49μm)
L (35μm)
HEAD AMP C.B.A. (VEP05149A)

NOTE: WHEN SECAM SIGNAL IS RECORDED WITH S-VHS MODE OR LP MODE, SECAM SIGNAL IS AUTOMATICALLY CONVERTED TO PAL SIGNAL AND IT IS RECORDED.

3-4. PAL/SECAM TRANSCODER & SECAM CHROMINANCE BLOCK DIAGRAM

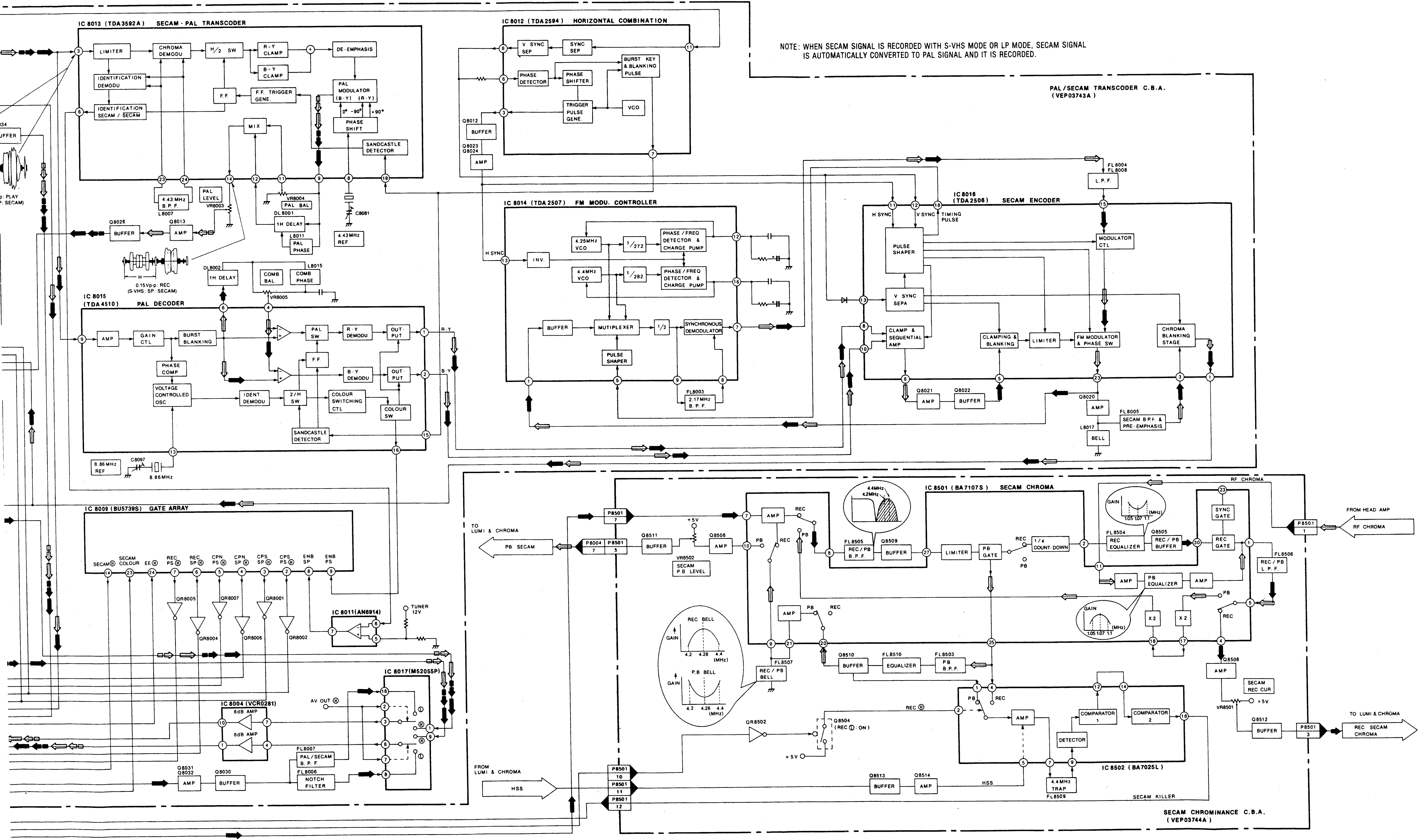

MAIN SIGNAL PATH IN REC MODE (VHS)
MAIN SIGNAL PATH IN REC MODE (S-VHS)
MAIN SIGNAL PATH IN PI
MAIN SIGNAL PATH IN PI
NOTE
IC 8001 (M52055P)
IC 8013 (TDA3592A) SECAM · PAL TRANSCODER
LIMITER
CHROMA DEMODU
H/2 SW
R-Y CLAMP
B-Y CLAMP
DE-EMPHASIS
IDENTIFICATION DEMODU
IDENTIFICATION SECAM / SECAM
F.F.
F.F. TRIGGER GENE.
PAL MODULATOR (B-Y) (R-Y)
PHASE SHIFT
SANDCASTLE DETECTOR
MIX
4.43 MHz B.P.F.
PAL LEVEL
VR8003
L8007
VR8004
PAL BAL
DL8001
1H DELAY
L8011
PAL PHASE
C8081
4.43MHz REF
IC 8012 (TDA2594) HORIZONTAL COMBINATION
V SYNC SEP
SYNC SEP
BURST KEY & BLANKING PULSE
PHASE DETECTOR
PHASE SHIFTER
TRIGGER PULSE GENE.
VCO
Q8012 BUFFER
Q8023 Q8024 AMP
IC 8014 (TDA2507) FM MODU. CONTROLLER
H SYNC
INV.
4.25MHz VCO
1/272
PHASE/FREQ DETECTOR & CHARGE PUMP
4.4MHz VCO
1/282
BUFFER
MUTIPLEXER
1/2
SYNCHRONOUS DEMODULATOR
PULSE SHAPER
FL8003 2.17MHz B.P.F.
FROM LUMI & CHROMA SEPARATION
SEP CHROMA SIG
FROM SUB LUMI & CHROMA
CHROMA SIG
FROM LUMI & CHROMA
EE Ⓡ
SEP LUMI SIG
LUMI SIG
P8003
P8001
0.45Vp-p: REC (S-VHS: SP: SECAM)
1.0Vp-p: PLAY (S-VHS: SP: SECAM)
0.8Vp-p: REC (S-VHS: SP: SECAM)
Q8001 BUFFER
FL8002 DELAY
Q8033 BUFFER
Q8004 AMP
Q8005 BUFFER
Q8002 AMP
Q8003 BUFFER
Q8034 BUFFER
0.12Vp-p: REC (S-VHS: SP: SECAM)
0.27Vp-p: PLAY (S-VHS: SP: SECAM)
TUNER 12V
Q8026 BUFFER
Q8013 AMP
0.15Vp-p: REC (S-VHS: SP: SECAM)
DL8002 1H DELAY
COMB BAL
COMB PHASE
L8015
VR8005
IC 8015 (TDA4510) PAL DECODER
AMP
GAIN CTL
BURST BLANKING
PHASE COMP
VOLTAGE CONTROLLED OSC
IDENT DEMODU
2/H SW
COLOUR SWITCHING CTL
SANDCASTLE DETECTOR
PAL SW
R-Y DEMODU
B-Y DEMODU
OUT-PUT
F.F.
COLOUR SW
R-Y
B-Y
8.86 MHz REF
C8097
8.86MHz
IC 8005 (TA7348P)
IC 8002 (TA7348P)
IC 8006 (TA7348P)
IC 8007 (TA7348P)
IC 8003 (TA7348P)
IC 8008 (TA7348P)
BUFFER
Ⓛ: ON
P8009
P8004
TO LUMI & CHROMA
0.85Vp-p: REC (S-VHS: SP: SECAM)
2.2Vp-p: PLAY (S-VHS: SP: SECAM)
1.9Vp-p: REC (S-VHS: SP: SECAM)
Q8007 BUFFER
Q8006 Q8008 AMP
P8005
FROM I/O PACK
1.1Vp-p: PLAY (S-VHS: SP: SECAM)
0.8Vp-p: REC (S-VHS: SP: SECAM)
P8006
TO S-TERMINAL
1.6Vp-p: REC 2.0Vp-p: PLAY (S-VHS: SP: SECAM)
TO I/O PACK (21PIN AV JACK)
P8002
TO LUMI & CHROMA
SECAM Ⓡ
IC 8009 (BU5739S) GATE ARRAY
SECAM Ⓡ
SECAM COLOUR
EE Ⓡ
REC PS Ⓡ
REC SP Ⓡ
CPN PS Ⓡ
CPN SP Ⓡ
CPS SP Ⓡ
CPS PS Ⓡ
ENB SP
ENB PS
QR8005
QR8004
QR8007
QR8006
QR8001
QR8002
IC 8011 (AN6914)
IC 8004 (VCR0281)
6dB AMP
IC 8017 (M52055P)
AV OUT Ⓡ
FL8007 PAL/SECAM B.P.F.
FL8006 NOTCH FILTER
Q8031 Q8032 AMP
Q8030 BUFFER
TO LUMI & CHROMA
PB SECAM
P8501
Q8511 BUFFER
+5V
VR8502 SECAM P.B. LEVEL
Q8506 AMP
PB
REC
AMP
REC BELL
GAIN
4.2 4.28 4.4 (MHz)
P.B BELL
FL8507
REC / PB BELL
QR8502
+5V C
FROM LUMI & CHROMA
HSS

◀■ MAIN SIGNAL PATH IN REC MODE (VHS)

◀■■ MAIN SIGNAL PATH IN REC MODE (S-VHS)

⇦ MAIN SIGNAL PATH IN PLAYBACK MODE (VHS)

⇦□ MAIN SIGNAL PATH IN PLAYBACK MODE (S-VHS)

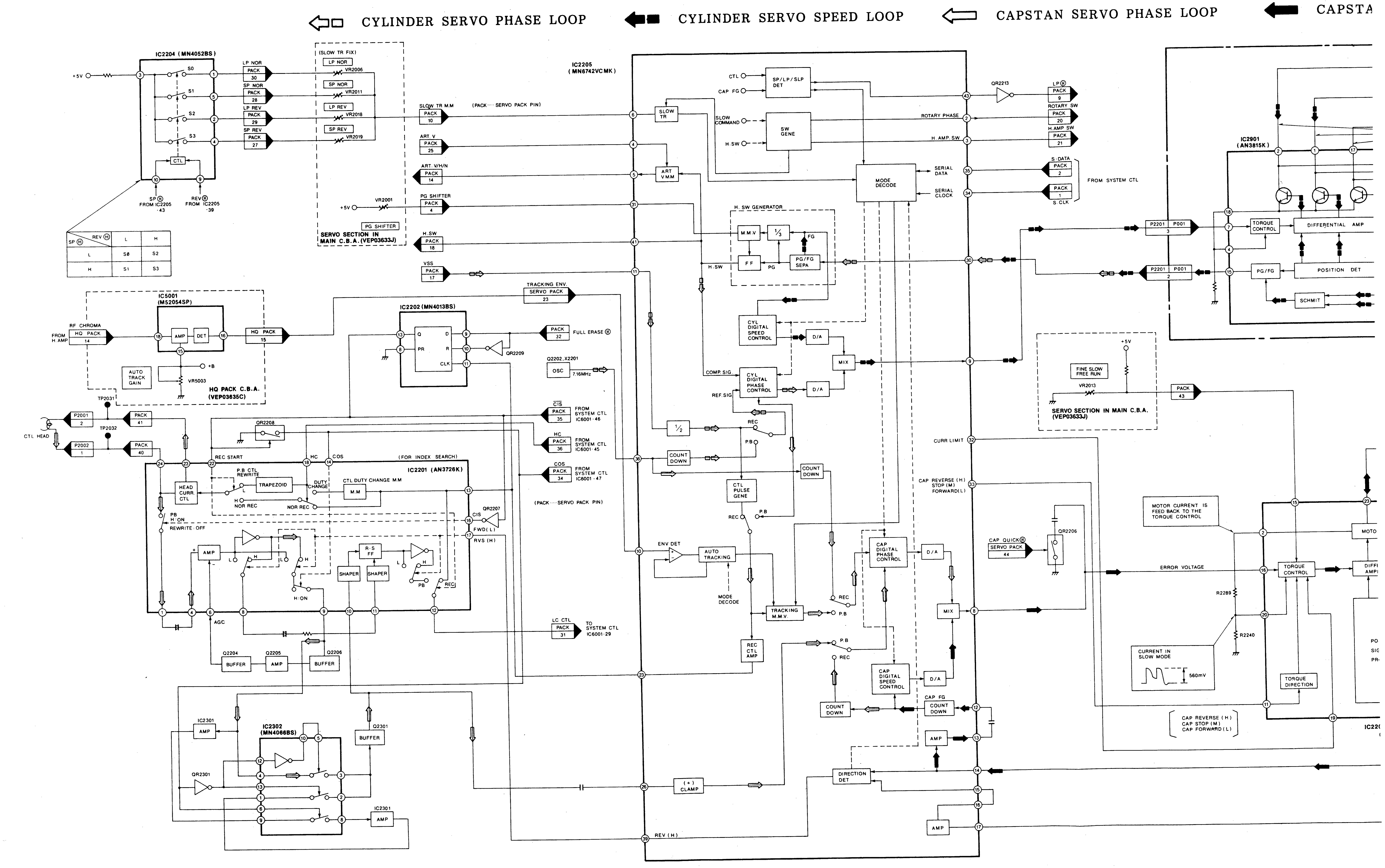


NOTE: WHEN SECAM SIGNAL IS RECORDED WITH S-VHS MODE OR LP MODE, SECAM SIGNAL IS AUTOMATICALLY CONVERTED TO PAL SIGNAL AND IT IS RECORDED.

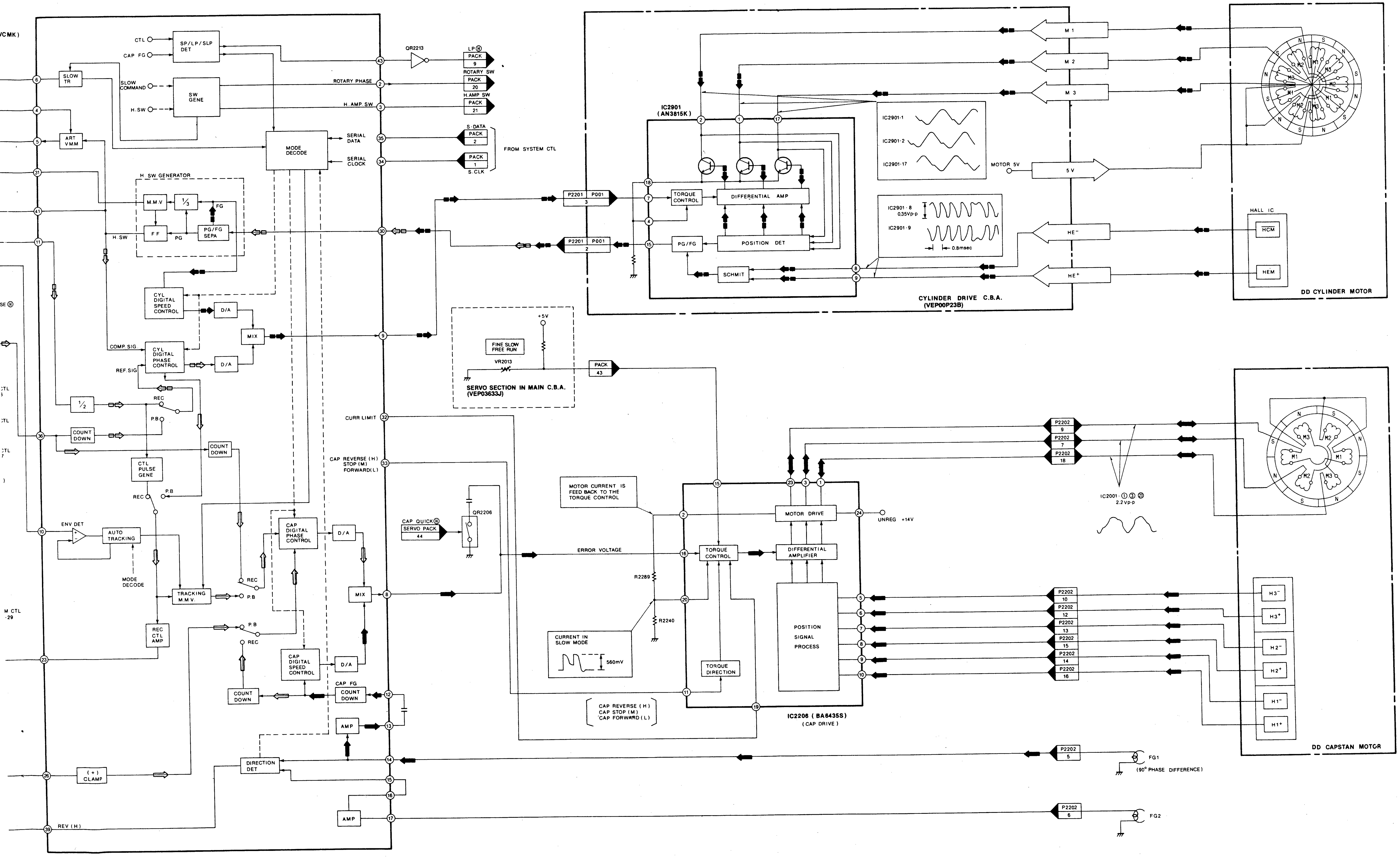
IC 8013 (TDA3592A) SECAM-PAL TRANSCODER
LIMITER
CHROMA DEMODU
H/2 SW
R-Y CLAMP
B-Y CLAMP
DE-EMPHASIS
IDENTIFICATION DEMODU
IDENTIFICATION SECAM / SECAM
F.F.
F.F. TRIGGER GENE.
PAL MODULATOR (B-Y) (R-Y)
0° -90° +90°
PHASE SHIFT
MIX
SANDCASTLE DETECTOR
4.43 MHz B.P.F.
L8007
PAL LEVEL
VR8003
VR8004 PAL BAL
DL8001 1H DELAY
L8011 PAL PHASE
C8081
4.43MHz REF
Q8026 BUFFER
Q8013 AMP
0.15Vp-p: REC (S-VHS: SP: SECAM)
p: PLAY
: SECAM)
UFFER
DL8002 1H DELAY
COMB BAL
COMB PHASE
L8015
VR8005
IC 8015 (TDA4510) PAL DECODER
AMP
GAIN CTL
BURST BLANKING
PHASE COMP
VOLTAGE CONTROLLED OSC
IDENT. DEMODU
2/H SW
PAL SW
F.F
R-Y DEMODU
B-Y DEMODU
OUT-PUT
COLOUR SWITCHING CTL
COLOUR SW
SANDCASTLE DETECTOR
R-Y
B-Y
8.86MHz REF
C8097
8.86MHz
IC 8012 (TDA2594) HORIZONTAL COMBINATION
V SYNC SEP
SYNC SEP
BURST KEY & BLANKING PULSE
PHASE DETECTOR
PHASE SHIFTER
TRIGGER PULSE GENE
VCO
Q8012 BUFFER
Q8023 Q8024 AMP
IC 8014 (TDA2507) FM MODU. CONTROLLER
H SYNC
INV.
4.25MHz VCO
1/272
PHASE/FREQ DETECTOR & CHARGE PUMP
4.4MHz VCO
1/282
BUFFER
MUTIPLEXER
1/2
SYNCHRONOUS DEMODULATOR
PULSE SHAPER
FL8003 2.17MHz B.P.F.
PAL/SECAM TRANSCODER C.B.A. (VEP03743A)
FL8004 FL8008
L.P.F.
IC 8016 (TDA2506) SECAM ENCODER
H SYNC
V SYNC
TIMING PULSE
PULSE SHAPER
MODULATOR CTL
V SYNC SEPA
CLAMP & SEQUENTIAL AMP
CLAMPING & BLANKING
LIMITER
FM MODULATOR & PHASE SW
CHROMA BLANKING STAGE
Q8021 AMP
Q8022 BUFFER
Q8020 AMP
FL8005 SECAM B.P.F. & PRE-EMPHASIS
L8017 BELL
IC 8009 (BU5739S) GATE ARRAY
SECAM Ⓡ
SECAM COLOUR
EE Ⓡ
REC PS Ⓡ
REC SP Ⓡ
CPN PS Ⓡ
CPN SP Ⓡ
CPS SP Ⓡ
CPS PS Ⓡ
ENB SP
ENB PS
QR8005
QR8004
QR8007
QR8006
QR8001
QR8002
IC 8011 (AN6914)
TUNER 12V
IC 8004 (VCR0281)
6dB AMP
AV OUT Ⓡ
IC 8017 (M52055P)
FL8007 PAL/SECAM B.P.F.
FL8006 NOTCH FILTER
Q8031 Q8032 AMP
Q8030 BUFFER
TO LUMI & CHROMA
PB SECAM
P8501
P8004
Q8511 BUFFER
+5V
VR8502 SECAM P.B LEVEL
Q8506 AMP
IC 8501 (BA7107S) SECAM CHROMA
AMP
REC
PB
4.4MHz
4.2MHz
FL8505 REC/PB B.P.F.
Q8509 BUFFER
LIMITER
PB GATE
1/4 COUNT-DOWN
FL8504 REC EQUALIZER
Q8505 REC/PB BUFFER
GAIN
(MHz)
1.05 1.07 1.1
SYNC GATE
REC GATE
RF CHROMA
FROM HEAD AMP
RF CHROMA
FL8506 REC/PB L.P.F.
AMP
PB EQUALIZER
X2
REC BELL
P.B BELL
GAIN
4.2 4.28 4.4 (MHz)
FL8507 REC/PB BELL
Q8510 BUFFER
FL8510 EQUALIZER
FL8503 PB B.P.F.
Q8508 AMP
SECAM REC CUR
VR8501
+5V
QR8502
Q8504 (REC Ⓛ : ON)
REC Ⓡ
COMPARATOR 1
COMPARATOR 2
DETECTOR
IC 8502 (BA7025L)
Q8512 BUFFER
TO LUMI & CHROMA
REC SECAM CHROMA
FROM LUMI & CHROMA
HSS
Q8513 BUFFER
Q8514 AMP
4.4MHz TRAP
FL8509
SECAM KILLER
SECAM CHROMINANCE C.B.A. (VEP03744A)

Next Page:
SERVO Section

3-5. SERVO BLOCK DIAGRAM


CYLINDER SERVO PHASE LOOP
CYLINDER SERVO SPEED LOOP
CAPSTAN SERVO PHASE LOOP
CAPSTA
IC2204 (MN4052BS)
+5V
S0
S1
S2
S3
CTL
SP Ⓗ FROM IC2205 ·43
REV Ⓗ FROM IC2205 ·39
SP Ⓗ \ REV Ⓗ | L | H
L | S0 | S2
H | S1 | S3
LP NOR PACK 30
SP NOR PACK 28
LP REV PACK 29
SP REV PACK 27
(SLOW TR FIX)
VR2006
VR2011
VR2018
VR2019
VR2001
PG SHIFTER
SERVO SECTION IN MAIN C.B.A. (VEP03633J)
SLOW TR M.M PACK 10
(PACK····SERVO PACK PIN)
ART. V PACK 25
ART. V/H/N PACK 14
PG SHIFTER PACK 4
H.SW PACK 18
VSS PACK 17
TRACKING ENV. SERVO PACK 23
IC5001 (M52054SP)
RF CHROMA
FROM H. AMP
HQ PACK 14
AMP
DET
HQ PACK 15
AUTO TRACK GAIN
VR5003
+B
HQ PACK C.B.A. (VEP03635C)
TP2031
TP2032
CTL HEAD
P2001 2
P2002 1
PACK 41
PACK 40
IC2202 (MN4013BS)
Q D PR R CLK
PACK 32
FULL ERASE Ⓗ
QR2209
Q2202, X2201
OSC
7.16MHz
CIS PACK 35 FROM SYSTEM CTL IC6001·46
HC PACK 36 FROM SYSTEM CTL IC6001·45
COS PACK 34 FROM SYSTEM CTL IC6001·47
(PACK····SERVO PACK PIN)
QR2208
REC START
HC
COS
(FOR INDEX SEARCH)
IC2201 (AN3726K)
P.B CTL REWRITE
TRAPEZOID
DUTY CHANGE
CTL DUTY CHANGE M.M
M.M
HEAD CURR. CTL
NOR REC
PB H:ON REWRITE: OFF
CIS
QR2207
FWD (L)
RVS (H)
AMP
R·S FF
SHAPER
SHAPER
H:ON
AGC
LC CTL PACK 31
TO SYSTEM CTL IC6001·29
Q2204 BUFFER
Q2205 AMP
Q2206 BUFFER
IC2301 AMP
IC2302 (MN4066BS)
QR2301
Q2301 BUFFER
IC2301 AMP
IC2205 (MN6742VCMK)
CTL
CAP FG
SP/LP/SLP DET
SLOW TR
SLOW COMMAND
SW GENE
H.SW
ART V.M.M
MODE DECODE
QR2213
LP Ⓗ PACK 9
ROTARY SW PACK 20
H.AMP SW PACK 21
ROTARY PHASE
H. AMP. SW
SERIAL DATA
SERIAL CLOCK
S-DATA PACK 2
PACK 1 S.CLK
FROM SYSTEM CTL
H. SW GENERATOR
M.M.V
1/3
FG
FF
PG
PG/FG SEPA
CYL DIGITAL SPEED CONTROL
D/A
MIX
COMP. SIG
REF. SIG
CYL DIGITAL PHASE CONTROL
1/2
REC
P.B
COUNT DOWN
CTL PULSE GENE
ENV DET
AUTO TRACKING
MODE DECODE
TRACKING M.M.V.
REC CTL AMP
CAP DIGITAL PHASE CONTROL
CAP DIGITAL SPEED CONTROL
CAP FG
AMP
DIRECTION DET
(+) CLAMP
REV (H)
CURR LIMIT
CAP REVERSE (H) STOP (M) FORWARD (L)
CAP QUICK Ⓗ SERVO PACK 44
QR2206
ERROR VOLTAGE
P2201 P001 3
P2201 P001 2
IC2901 (AN3815K)
TORQUE CONTROL
DIFFERENTIAL AMP
PG/FG
POSITION DET
SCHMIT
+5V
FINE SLOW FREE RUN
VR2013
PACK 43
SERVO SECTION IN MAIN C.B.A. (VEP03633J)
MOTOR CURRENT IS FEED BACK TO THE TORQUE CONTROL
R2289
R2240
CURRENT IN SLOW MODE
560mV
TORQUE CONTROL
TORQUE DIRECTION
MOTO
DIFF AMP
CAP REVERSE (H) CAP STOP (M) CAP FORWARD (L)
IC22

◀ CYLINDER SERVO SPEED LOOP ⇦ CAPSTAN SERVO PHASE LOOP ◀ CAPSTAN SERVO SPEED LOOP

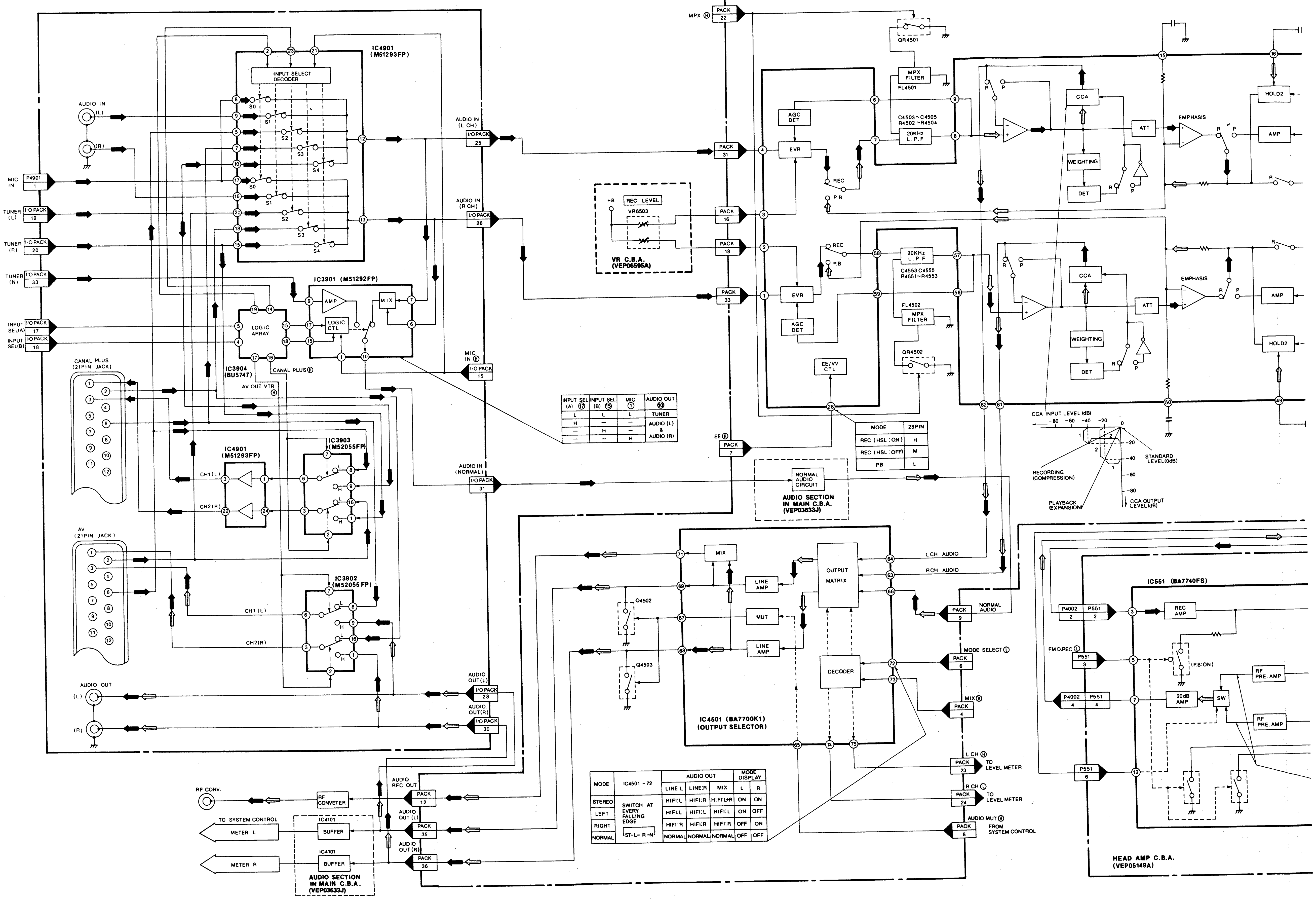


CTL
CAP FG
SP/LP/SLP DET
SLOW TR
SLOW COMMAND
SW GENE
H.SW
ART VMM
MODE DECODE
SERIAL DATA
SERIAL CLOCK
H. SW GENERATOR
M.M.V
1/3
FG
F F
PG
PG/FG SEPA
H.SW
CYL DIGITAL SPEED CONTROL
D/A
MIX
COMP. SIG
REF. SIG
CYL DIGITAL PHASE CONTROL
D/A
1/2
REC
P.B
COUNT DOWN
CTL PULSE GENE
ENV DET
AUTO TRACKING
MODE DECODE
TRACKING M.M.V.
REC CTL AMP
CAP DIGITAL PHASE CONTROL
CAP DIGITAL SPEED CONTROL
CAP FG
COUNT DOWN
AMP
DIRECTION DET
(+) CLAMP
REV (H)
QR2213
LP Ⓗ PACK 9
ROTARY SW PACK 20
H.AMP SW PACK 21
S. DATA PACK 2
PACK 1 S. CLK
FROM SYSTEM CTL
ROTARY PHASE
H. AMP. SW
CURR LIMIT
CAP REVERSE (H) STOP (M) FORWARD (L)
CAP QUICK Ⓗ SERVO PACK 44
QR2206
ERROR VOLTAGE
P2201 P001 3
P2201 P001 2
IC2901 (AN3815K)
TORQUE CONTROL
DIFFERENTIAL AMP
PG/FG
POSITION DET
SCHMIT
M 1
M 2
M 3
IC2901-1
IC2901-2
IC2901-17
MOTOR 5V
5 V
IC2901-8 0.35Vp-p
IC2901-9
0.8msec
HE⁻
HE⁺
HALL IC
HCM
HEM
DD CYLINDER MOTOR
CYLINDER DRIVE C.B.A. (VEP00P23B)
+5V
FINE SLOW FREE RUN
VR2013
PACK 43
SERVO SECTION IN MAIN C.B.A. (VEP03633J)
MOTOR CURRENT IS FEED BACK TO THE TORQUE CONTROL
R2289
R2240
CURRENT IN SLOW MODE
560mV
MOTOR DRIVE
UNREG +14V
TORQUE CONTROL
DIFFERENTIAL AMPLIFIER
POSITION SIGNAL PROCESS
TORQUE DIRECTION
CAP REVERSE (H) CAP STOP (M) CAP FORWARD (L)
IC2206 (BA6435S) (CAP DRIVE)
P2202 9
P2202 7
P2202 18
P2202 10
P2202 12
P2202 13
P2202 15
P2202 14
P2202 16
P2202 5
P2202 6
IC2001-①③㉓ 2.2Vp-p
H3⁻
H3⁺
H2⁻
H2⁺
H1⁻
H1⁺
DD CAPSTAN MOTOR
FG1 (90° PHASE DIFFERENCE)
FG2
N
S
M1
M2
M3

3-6. Hi-Fi AUDIO BLOCK DIAGRAM

MAIN SIGNAL PATH IN REC MODE

MAIN SIGNAL PATH IN PLAYBACI

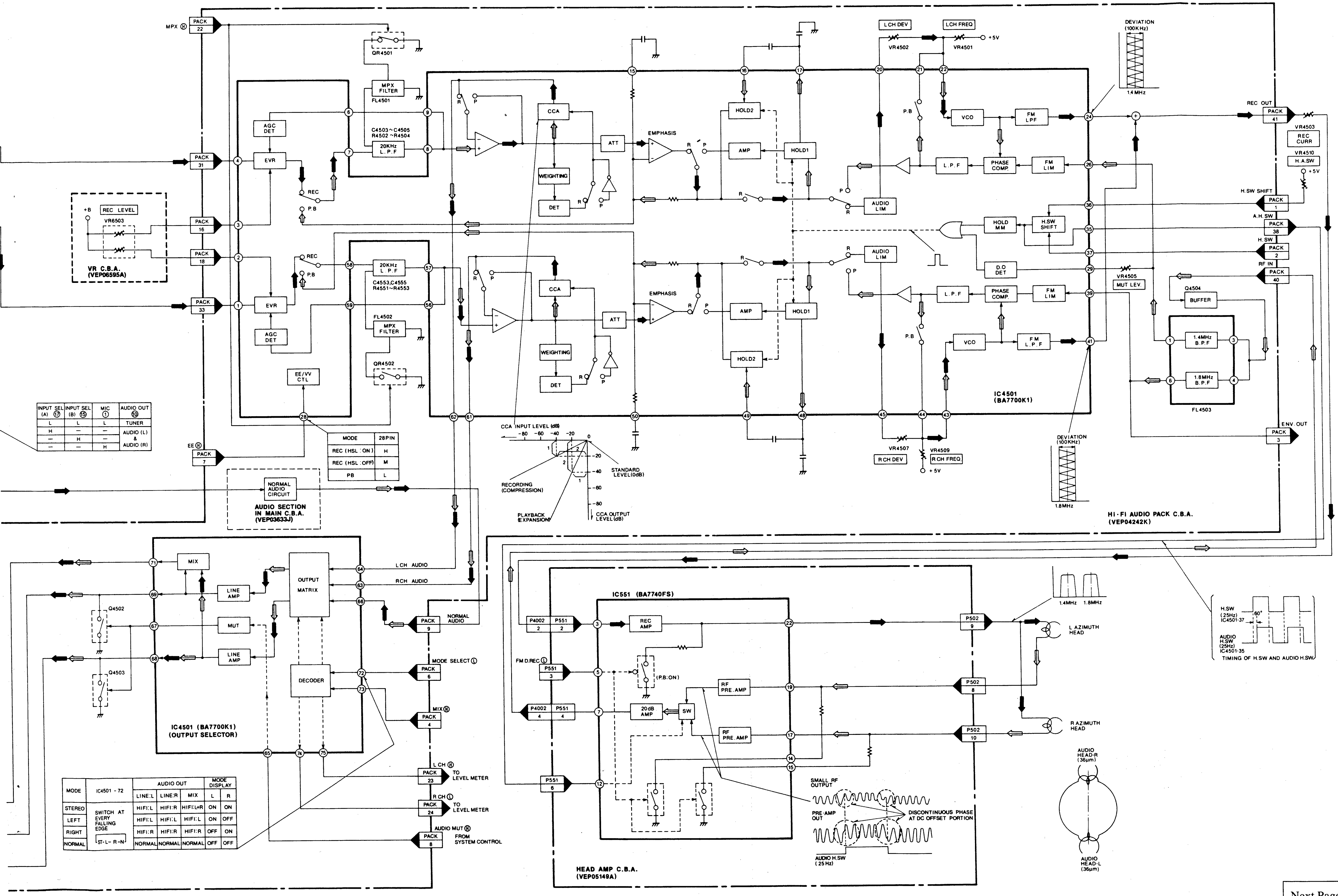

IC4901 (M51293FP)
INPUT SELECT DECODER
S0
S1
S2
S3
S4
AUDIO IN (L) (R)
MIC IN P4901 1
TUNER (L) I/O PACK 19
TUNER (R) I/O PACK 20
TUNER (N) I/O PACK 33
INPUT SEL(A) I/O PACK 17
INPUT SEL(B) I/O PACK 18
IC3901 (M51292FP)
AMP
MIX
LOGIC CTL
LOGIC ARRAY
IC3904 (BU5747)
CANAL PLUS Ⓗ
AV OUT VTR Ⓗ
CANAL PLUS (21PIN JACK)
AV (21PIN JACK)
IC4901 (M51293FP)
CH1(L)
CH2(R)
IC3903 (M52055FP)
IC3902 (M52055 FP)
CH1 (L)
CH2(R)
AUDIO OUT (L) (R)
AUDIO IN (L CH) I/O PACK 25
AUDIO IN (R CH) I/O PACK 26
MIC IN Ⓗ I/O PACK 15
AUDIO IN (NORMAL) I/O PACK 31
AUDIO OUT(L) I/O PACK 28
AUDIO OUT(R) I/O PACK 30
RF CONV.
RF CONVETER
TO SYSTEM CONTROL
METER L
METER R
IC4101 BUFFER
IC4101 BUFFER
AUDIO SECTION IN MAIN C.B.A. (VEP03633J)
AUDIO RFC OUT PACK 12
AUDIO OUT (L) PACK 35
AUDIO OUT (R) PACK 36
MPX Ⓗ PACK 22
QR4501
MPX FILTER FL4501
C4503~C4505 R4502~R4504
20KHz L.P.F
AGC DET
EVR
REC
P.B
PACK 31
PACK 16
PACK 18
PACK 33
+B REC LEVEL VR6503
VR C.B.A. (VEP06595A)
20KHz L.P.F
C4553,C4555 R4551~R4553
FL4502 MPX FILTER
QR4502
EE/VV CTL
EE Ⓗ PACK 7
NORMAL AUDIO CIRCUIT
AUDIO SECTION IN MAIN C.B.A. (VEP03633J)
CCA
WEIGHTING
DET
ATT
EMPHASIS
AMP
HOLD2
R P
CCA INPUT LEVEL (dB)
-80 -60 -40 -20 0
-20 -40 -60 -80
STANDARD LEVEL(0dB)
RECORDING (COMPRESSION)
PLAYBACK (EXPANSION)
CCA OUTPUT LEVEL (dB)
MIX
LINE AMP
MUT
LINE AMP
OUTPUT MATRIX
DECODER
Q4502
Q4503
IC4501 (BA7700K1) (OUTPUT SELECTOR)
L CH AUDIO
RCH AUDIO
NORMAL AUDIO PACK 9
MODE SELECT Ⓛ PACK 6
MIX Ⓗ PACK 4
L CH Ⓗ PACK 23 TO LEVEL METER
R CH Ⓛ PACK 24 TO LEVEL METER
AUDIO MUT Ⓗ PACK 8 FROM SYSTEM CONTROL
IC551 (BA7740FS)
P4002 P551 2 2
REC AMP
FM.D.REC Ⓛ P551 3
(P.B:ON)
RF PRE.AMP
P4002 P551 4 4
20dB AMP
SW
RF PRE.AMP
P551 6
HEAD AMP C.B.A. (VEP05149A)

INPUT SEL (A) ⑰	INPUT SEL (B) ⑮	MIC ①	AUDIO OUT ⑩
L	L	L	TUNER
H	—	—	AUDIO (L) & AUDIO (R)
—	H	—	
—	—	H	

MODE	28PIN
REC (HSL : ON)	H
REC (HSL : OFF)	M
PB	L

MODE	IC4501 - 72	AUDIO OUT			MODE DISPLAY	
		LINE:L	LINE:R	MIX	L	R
STEREO	SWITCH AT EVERY FALLING EDGE ST- L- R -N	HIFI:L	HIFI:R	HIFI:L+R	ON	ON
LEFT		HIFI:L	HIFI:L	HIFI:L	ON	OFF
RIGHT		HIFI:R	HIFI:R	HIFI:R	OFF	ON
NORMAL		NORMAL	NORMAL	NORMAL	OFF	OFF

IN SIGNAL PATH IN REC MODE ⇦ MAIN SIGNAL PATH IN PLAYBACK MODE


MPX Ⓗ
PACK 22
QR4501
MPX FILTER
FL4501
C4503~C4505
R4502~R4504
20KHz L.P.F
AGC DET
EVR
REC
P.B
PACK 31
PACK 16
PACK 18
PACK 33
+B
REC LEVEL
VR6503
VR C.B.A. (VEP06595A)
20KHz L.P.F
C4553,C4555
R4551~R4553
FL4502
MPX FILTER
QR4502
EE/VV CTL
EE Ⓗ
PACK 7
NORMAL AUDIO CIRCUIT
AUDIO SECTION IN MAIN C.B.A. (VEP03633J)
CCA
WEIGHTING
DET
ATT
EMPHASIS
AMP
HOLD1
HOLD2
AUDIO LIM
L.P.F
PHASE COMP.
FM LIM
VCO
FM LPF
HOLD MM
H.SW SHIFT
D.O DET
L CH DEV
L CH FREQ
VR4502
VR4501
+5V
R CH DEV
R CH FREQ
VR4507
VR4509
IC4501 (BA7700K1)
CCA INPUT LEVEL (dB)
-80 -60 -40 -20 0
-20 -40 -60 -80
STANDARD LEVEL(0dB)
RECORDING (COMPRESSION)
PLAYBACK (EXPANSION)
CCA OUTPUT LEVEL (dB)
DEVIATION (100KHz)
1.4 MHz
1.8MHz
REC OUT
PACK 41
VR4503
REC CURR
VR4510
H.A.SW
H.SW SHIFT
PACK 1
A.H.SW
PACK 38
H.SW
PACK 2
RF IN
PACK 40
VR4505
MUT LEV
Q4504
BUFFER
1.4MHz B.P.F
1.8MHz B.P.F
FL4503
ENV OUT
PACK 3
HI-FI AUDIO PACK C.B.A. (VEP04242K)
MIX
LINE AMP
MUT
OUTPUT MATRIX
DECODER
Q4502
Q4503
LCH AUDIO
RCH AUDIO
NORMAL AUDIO
PACK 9
MODE SELECT Ⓛ
PACK 6
MIX Ⓗ
PACK 4
IC4501 (BA7700K1) (OUTPUT SELECTOR)
L CH Ⓗ
PACK 23
TO LEVEL METER
R CH Ⓛ
PACK 24
TO LEVEL METER
AUDIO MUT Ⓗ
PACK 8
FROM SYSTEM CONTROL
IC551 (BA7740FS)
REC AMP
FM D.REC Ⓛ
P4002
P551
P502
(P.B:ON)
RF PRE.AMP
20dB AMP
SW
HEAD AMP C.B.A. (VEP05149A)
1.4MHz 1.8MHz
L AZIMUTH HEAD
R AZIMUTH HEAD
SMALL RF OUTPUT
PRE-AMP OUT
DISCONTINUOUS PHASE AT DC OFFSET PORTION
AUDIO H.SW (25 Hz)
AUDIO HEAD-R (36μm)
AUDIO HEAD-L (36μm)
H.SW (25Hz) IC4501-37
60°
AUDIO H.SW (25Hz) IC4501-35
TIMING OF H.SW AND AUDIO H.SW

INPUT SEL (A) ⑰	INPUT SEL (B) ⑮	MIC ①	AUDIO OUT ⑩
L	L	L	TUNER
H	—	—	AUDIO (L) & AUDIO (R)
—	H	—	
—	—	H	

MODE	28PIN
REC (HSL : ON)	H
REC (HSL : OFF)	M
PB	L

MODE	IC4501 - 72	AUDIO OUT			MODE DISPLAY	
		LINE:L	LINE:R	MIX	L	R
STEREO	SWITCH AT EVERY FALLING EDGE ST-L-R-N	HIFI:L	HIFI:R	HIFI:L+R	ON	ON
LEFT		HIFI:L	HIFI:L	HIFI:L	ON	OFF
RIGHT		HIFI:R	HIFI:R	HIFI:R	OFF	ON
NORMAL		NORMAL	NORMAL	NORMAL	OFF	OFF

Next Page:
MAIN C.B.A. Section

3-7. MAIN C.B.A. (VEP03633J)

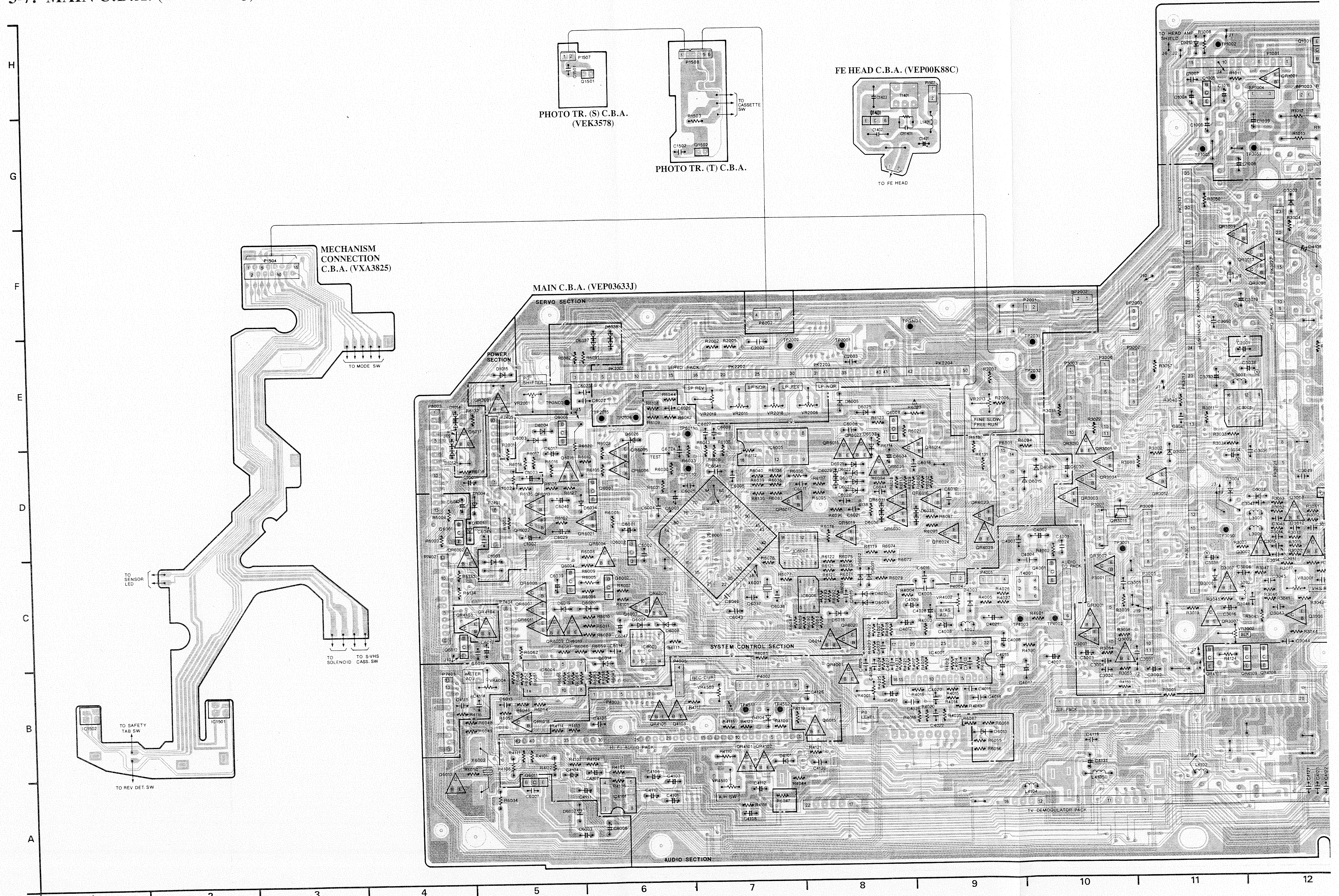
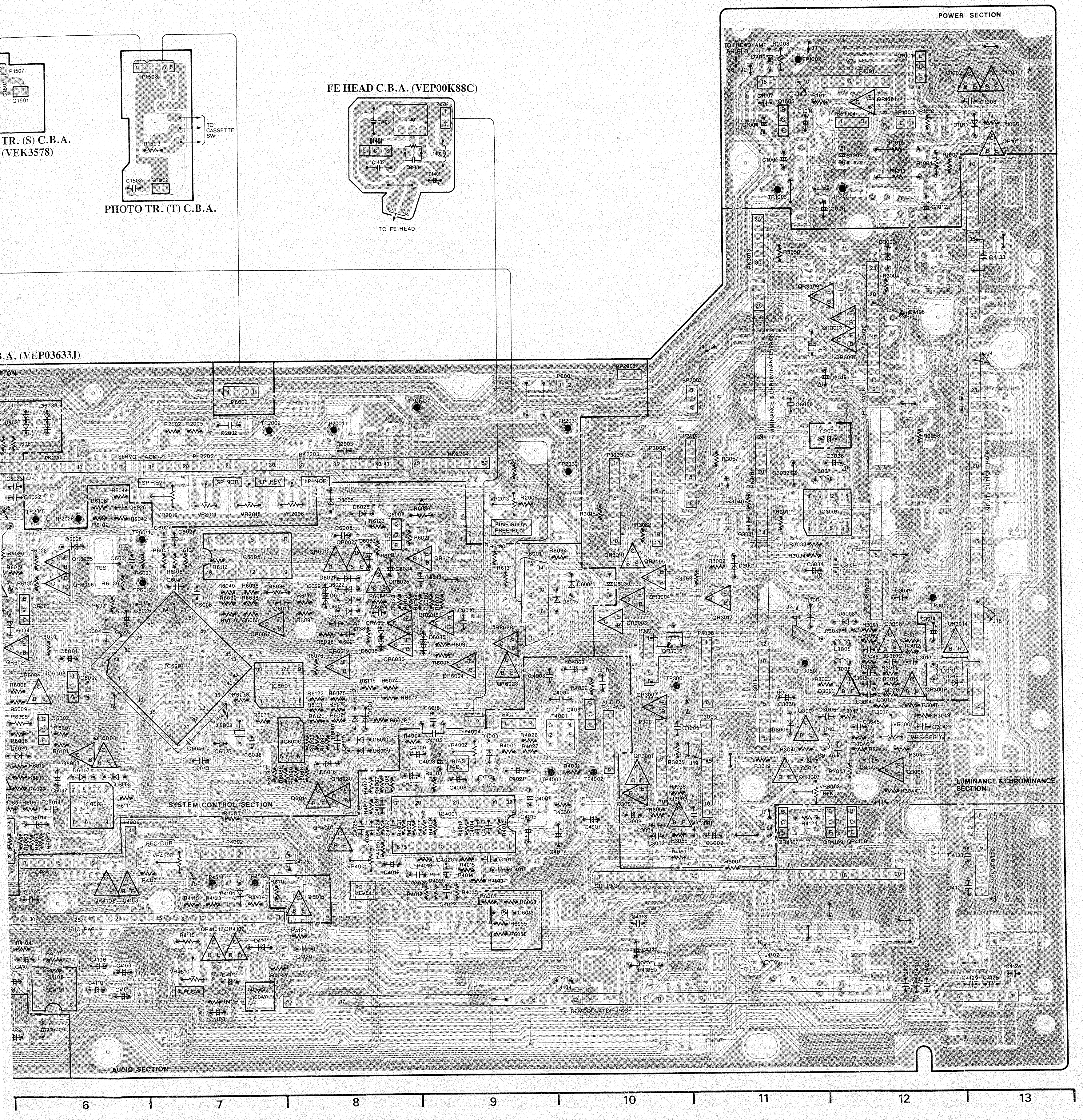


PHOTO TR. (S) C.B.A. (VEK3578)
PHOTO TR. (T) C.B.A.
TO CASSETTE SW
FE HEAD C.B.A. (VEP00K88C)
TO FE HEAD
MECHANISM CONNECTION C.B.A. (VXA3825)
TO MODE SW
TO SENSOR LED
TO SOLENOID
TO S-VHS CASS. SW
TO SAFETY TAB SW
TO REV DET. SW
MAIN C.B.A. (VEP03633J)
SERVO SECTION
POWER SECTION
SERVO PACK
SYSTEM CONTROL SECTION
HI-FI AUDIO PACK
AUDIO SECTION
TV DEMODULATOR PACK
SIF PACK
LUMINANCE & CHROMINANCE PACK
TO HEAD AMP SHIELD
FINE SLOW FREE RUN
TEST
REC CUR
PB LEVEL
METER ADJ
A.H. SW
BIAS ADJ
AUDIO EQ PACK
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12



MAIN C.B.A. ADDRESS INFORMATION

POWER Section	
Transistor	
Q1001	H-12
Q1002	H-13
Q1003	H-13
Q1005	H-11
Transistor & Resistor	
QR1001	H-12
QR1002	G-13
Test Point	
TP1002	H-11
TP1003	G-11
Connector	
P1001	H-12
P6003	E-4
P7401	D-5
P7405	E-5
BP1003	H-12
BP1004	H-12

ADDRESS INFORMATION

LUMINANCE & CHROMINANCE Section	
Transistor	
Q3001	C-10
Q3002	C-12
Q3006	C-12
Q3007	C-11
Q3008	D-12
Q3009	B-10
Transistor & Resistor	
QR3001	C-10
QR3002	C-10
QR3003	D-10
QR3004	D-10
QR3005	D-10
QR3006	C-12
QR3007	C-11
QR3008	F-12
QR3009	F-12
QR3010	D-10
QR3012	D-11
QR3013	F-12
QR3014	D-12
Integrated Circuit	
IC3001	E-12
Test Point	
TP3001	C-10
TP3002	D-12
TP3050	D-11
TP3051	G-12
Adjustment	
VR3001	C-12
VR3002	C-12
Connector	
P3001	C-10
P3002	E-11
P3003	E-10
P3005	C-11
P3006	E-10
P3007	D-10
P3008	D-11
PK3011	C-11
PK3012	E-11
PK3013	G-11
PK3021	D-12
PK3022	F-12

ADDRESS INFORMATION

SYSTEM CONTROL Section	
Transistor	
Q1401	G-8
Q1501	H-6
Q1502	G-7
Q6001	D-4
Q6002	C-6
Q6003	C-6
Q6004	C-5
Q6006	E-5
Q6007	D-6
Q6008	E-8
Q6011	A-5
Q6012	C-4
Q6013	B-4
Q6014	C-8
Q6015	B-8
Q6016	D-5
Q6017	E-5
Transistor & Resistor	
QR6002	C-4
QR6003	C-6
QR6004	D-6
QR6005	D-6
QR6006	D-6
QR6007	C-5
QR6008	C-5
QR6009	C-5
QR6010	C-5
QR6011	C-5
QR6013	D-5
QR6014	D-9
QR6015	D-8
QR6016	D-9
QR6017	D-7
QR6018	B-5
QR6019	D-8
QR6020	C-8
QR6021	D-6
QR6022	D-5
QR6024	D-9
QR6025	D-8
QR6027	E-8
QR6028	C-9
QR6029	D-9
QR6030	D-8
QR6031	D-8
Integrated Circuit	
IC1501	B-2
IC1502	B-1
IC6001	D-7
IC6002	D-6
IC6003	C-6
IC6004	B-5
IC6005	D-7
IC6006	C-8
IC6007	C-8
Test Point	
TP6010	D-7
TP6011	E-7
Connector	
P1502	H-9
P1504	F-3
P1507	H-6
P1508	H-7
P4004	C-9
P6001	D-9
P6002	F-7
P7402	D-4
P7404	C-5

ADDRESS INFORMATION

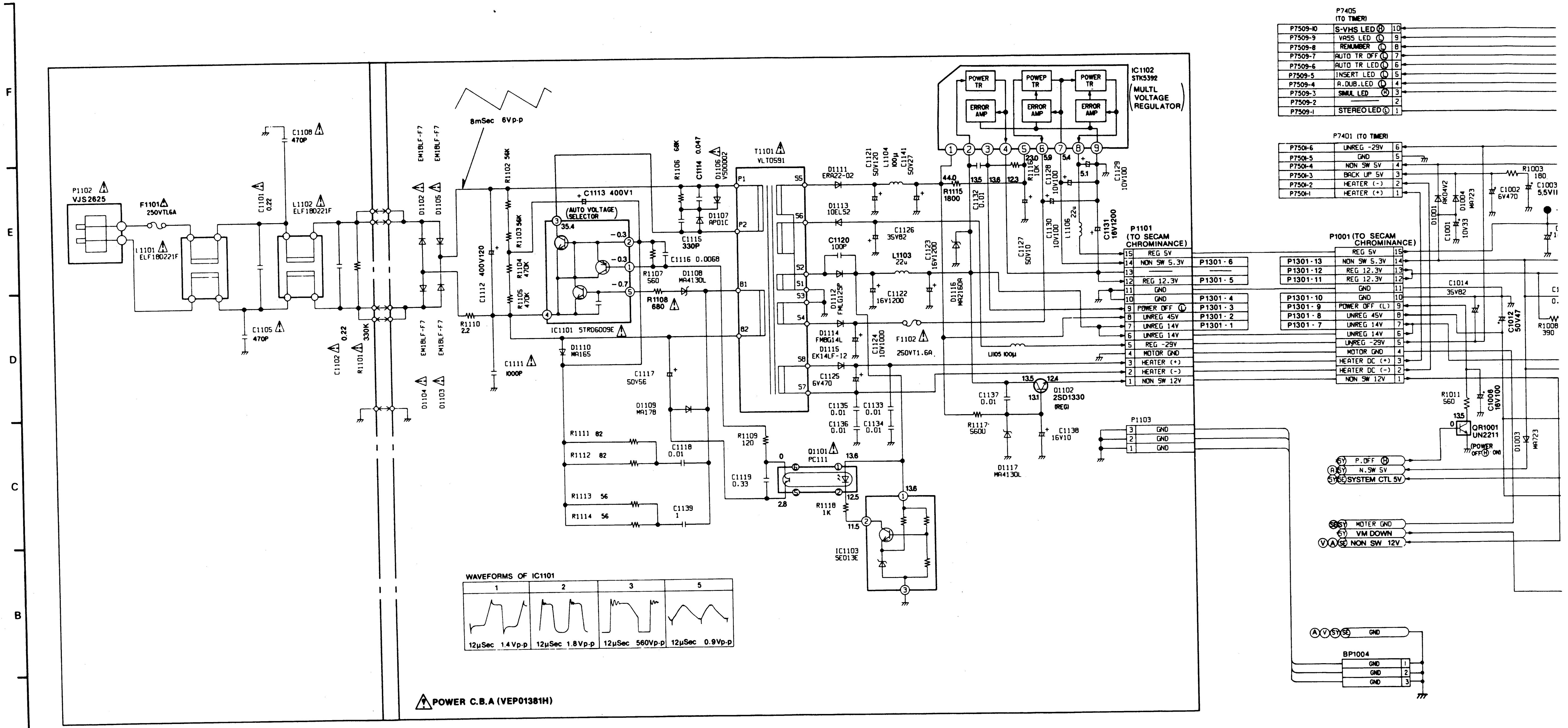
SERVO Section	
Transistor & Resistor	
QR2001	E-5
Test Point	
TP2001	E-8
TP2002	E-7
TP2015	E-6
TP2026	E-6
TP2031	E-10
TP2032	E-10
TP GND1	F-9
TP GND3	E-5
Adjustment	
VR2001	E-5
VR2006	E-8
VR2011	E-7
VR2013	E-9
VR2018	E-7
VR2019	E-7
Connector	
P2001	F-10
BP2002	F-10
BP2003	F-11
PK2202	E-7
PK2203	E-8
PK2204	E-9

ADDRESS INFORMATION

AUDIO Section	
Transistor	
Q4001	C-10
Q4103	B-6
Transistor & Resistor	
QR4001	B-8
QR4101	B-7
QR4102	B-7
QR4103	C-4
QR4104	C-5
QR4105	B-6
QR4107	B-11
QR4108	B-12
QR4109	B-12
Integrated Circuit	
IC4001	C-9
IC4101	A-6
Test Point	
TP4002	C-10
TP4003	C-9
TP4502	B-7
TP4511	B-7
Adjustment	
VR4001	B-8
VR4002	C-9
VR4004	B-5
VR4503	B-7
VR4510	A-7
Connector	
P4001	C-9
P4002	B-7
P4003	B-6
P4005	B-6
P7403	B-4

ADDRESS INFORMATION

3-8. POWER SCHEMATIC DIAGRAM

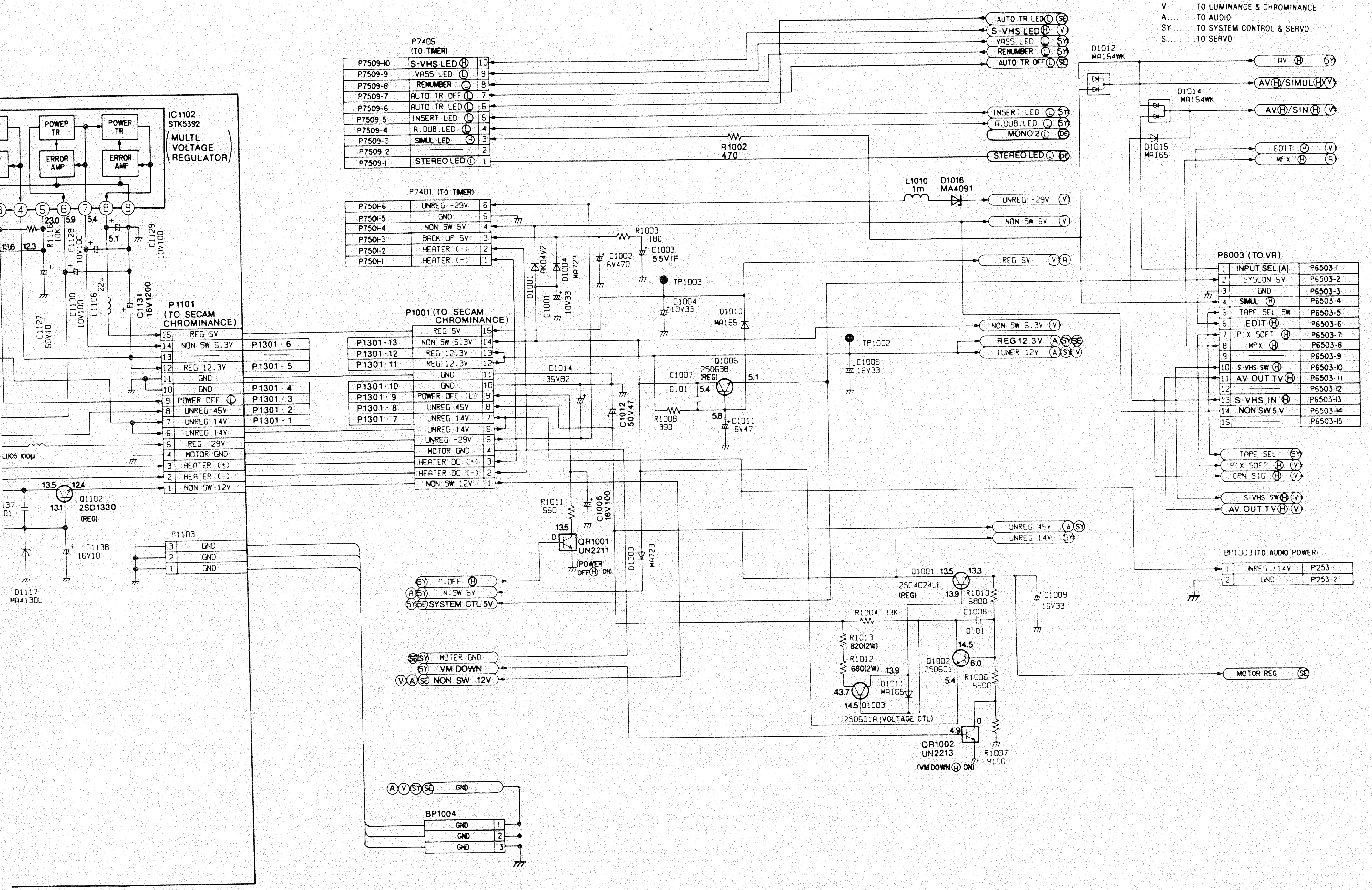

F
E
D
C
B
A
P1102 VJS2625
F1101 250VTL6A
L1101 ELF18D221F
C1108 470P
C1101 0.22
L1102 ELF18D221F
C1105 470P
C1102 0.22
R1101 330K
D1102 EM1BLF-F7
D1105 EM1BLF-F7
D1104 EM1BLF-F7
D1103 EM1BLF-F7
8mSec 6Vp-p
C1112 400V120
R1102 56K
R1103 56K
R1104 470K
R1105 470K
R1110 2.2
C1111 1000P
C1113 400V1
(AUTO VOLTAGE SELECTOR)
35.4
-0.3
-0.3
-0.7
IC1101 STR06009E
D1110 MA165
R1107 560
R1108 680
D1108 MA4130L
C1115 330P
C1116 0.0068
R1106 68K
C1114 0.047
D1106 V500002
D1107 RPD1C
T1101 VLT0591
P1
P2
B1
B2
S5
S6
S2
S1
S3
S4
S8
S7
C1117 50V56
D1109 MA178
R1111 82
R1112 82
C1118 0.01
R1113 56
R1114 56
C1139 1
R1109 120
C1119 0.33
D1101 PC111
0
2.8
13.6
12.5
R1118 1K
11.5
IC1103 SE013E
13.6
D1111 ERA22-02
C1121 50V120
L1104 100μ
C1141 50V27
D1113 10EL52
C1126 35V82
C1120 100P
L1103 22u
C1123 16V1200
D1112 FMLG12SP
C1122 16V1200
D1114 FMBG14L
D1115 EK14LF-12
C1124 10V1000
F1102 250VT1.6A
C1125 6V470
D1116 MA2160A
L1105 100μ
C1135 0.01
C1133 0.01
C1136 0.01
C1134 0.01
IC1102 STK5392 (MULTL VOLTAGE REGULATOR)
POWER TR
POWEP TR
POWER TR
ERROR AMP
ERROR AMP
ERROR AMP
44.0
R1115 1800
13.5
13.6
12.3
23.0
5.9
5.4
5.1
R1116 10K
C1132 0.01
C1127 50V10
C1128 10V100
C1130 10V100
L1106 22u
C1131 16V1200
C1129 10V100
13.5
12.4
13.1
Q1102 2SD1330 (REG)
C1137 0.01
R1117 5600
D1117 MA4130L
C1138 16V10
P1101 (TO SECAM CHROMINANCE)
15 REG 5V
14 NON SW 5.3V — P1301-6
13 —— — ——
12 REG 12.3V — P1301-5
11 GND
10 GND — P1301-4
9 POWER OFF Ⓛ — P1301-3
8 UNREG 45V — P1301-2
7 UNREG 14V — P1301-1
6 UNREG 14V
5 REG -29V
4 MOTOR GND
3 HEATER (+)
2 HEATER (-)
1 NON SW 12V
P1103
3 GND
2 GND
1 GND
P7405 (TO TIMER)
P7509-10 S-VHS LED Ⓗ 10
P7509-9 VASS LED Ⓛ 9
P7509-8 RENUMBER Ⓛ 8
P7509-7 AUTO TR OFF Ⓛ 7
P7509-6 AUTO TR LED Ⓛ 6
P7509-5 INSERT LED Ⓛ 5
P7509-4 A.DUB.LED Ⓛ 4
P7509-3 SIMUL LED Ⓗ 3
P7509-2 —— 2
P7509-1 STEREO LED Ⓛ 1
P7401 (TO TIMER)
P7501-6 UNREG -29V 6
P7501-5 GND 5
P7501-4 NON SW 5V 4
P7501-3 BACK UP 5V 3
P7501-2 HEATER (-) 2
P7501-1 HEATER (+) 1
D1001 AK04V2
D1004 MA723
C1001 10V33
C1002 6V470
R1003 180
C1003 5.5V1
P1001 (TO SECAM CHROMINANCE)
REG 5V 15
P1301-13 NON SW 5.3V 14
P1301-12 REG 12.3V 13
P1301-11 REG 12.3V 12
GND 11
P1301-10 GND 10
P1301-9 POWER OFF (L) 9
P1301-8 UNREG 45V 8
P1301-7 UNREG 14V 7
UNREG 14V 6
UNREG -29V 5
MOTOR GND 4
HEATER DC (+) 3
HEATER DC (-) 2
NON SW 12V 1
C1014 35V82
C1012 50V47
R1008 390
R1011 560
C1008 16V100
13.5
0
QR1001 UN2211 (POWER OFF Ⓗ ON)
D1003 MA723
P.OFF Ⓗ
N.SW 5V
SYSTEM CTL 5V
MOTER GND
VM DOWN
NON SW 12V
GND
BP1004
GND 1
GND 2
GND 3
WAVEFORMS OF IC1101
1
2
3
5
12μSec 1.4Vp-p
12μSec 1.8Vp-p
12μSec 560Vp-p
12μSec 0.9Vp-p
POWER C.B.A (VEP01381H)

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.

NOTE 1. WHEN MEASURE THE VOLTAGE OR WAVEFORM ON THE POWER TRANSFORMER CIRCUIT, SET THE GND TERMINAL OF MEASURING POINT AS FOLLOWS.
PRIMARY SIDE ..... IC1101-(4)
SECONDARY SIDE ... TP GND OF MAIN C.B.A.
NOTE 2. THE DC VOLTAGE INDICATED IN PRIMARY SIDE IS SHOWN THE VOLTAGE WHEN INPUT AC IS 220V.

NOTE: THE MEASUREMENT MODE

1 2 3 4 5 6 7 8 9 10 11 12

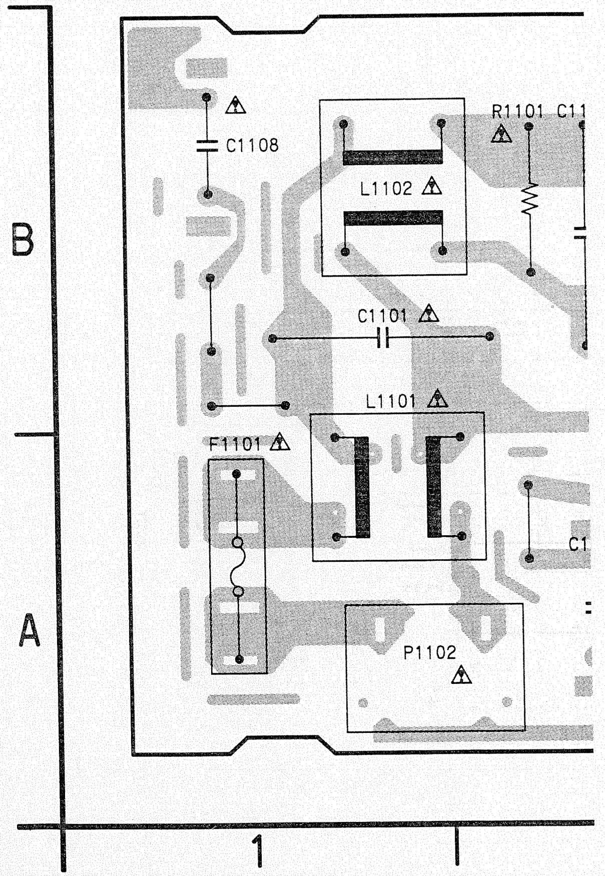

V .... TO LUMINANCE & CHROMINANCE
A .... TO AUDIO
SY .... TO SYSTEM CONTROL & SERVO
S .... TO SERVO
IC1102
STK5392
MULTL VOLTAGE REGULATOR
POWER TR
ERROR AMP
P7405 (TO TIMER)
P7401 (TO TIMER)
P1101 (TO SECAM CHROMINANCE)
P1001 (TO SECAM CHROMINANCE)
P6003 (TO VR)
BP1003 (TO AUDIO POWER)
BP1004
P1103
AUTO TR LED
S-VHS LED
VASS LED
RENUMBER
AUTO TR OFF
INSERT LED
A.DUB.LED
MONO 2
STEREO LED
SIMUL LED
UNREG -29V
NON SW 5V
BACK UP 5V
HEATER (-)
HEATER (+)
REG 5V
NON SW 5.3V
REG 12.3V
TUNER 12V
GND
POWER OFF
UNREG 45V
UNREG 14V
MOTOR GND
NON SW 12V
MOTOR REG
P.OFF
N.SW 5V
SYSTEM CTL 5V
VM DOWN
AV
AV/SIMUL
AV/SIN
EDIT
MPX
TAPE SEL
PIX SOFT
CPN SIG
S-VHS SW
AV OUT TV
INPUT SEL (A)
SYSCON 5V
S-VHS IN
NON SW 5 V
Q1001 2SC4024LF (REG)
Q1002 2SD601
Q1003 2SD601A (VOLTAGE CTL)
Q1005 2SD638 (REG)
Q1102 2SD1330 (REG)
QR1001 UN2211 (POWER OFF)
QR1002 UN2213 (VM DOWN)
D1012 MA154WK
D1014 MA154WK
D1015 MA165
D1016 MA4091
D1010 MA165
D1011 MA165
D1117 MA4130L
L1010 1m
R1002 470
R1003 180
R1004 33K
R1008 390
R1011 560
R1013 820(2W)
R1012 680(2W)
R1006 5600
R1007 9100
R1010 6800
TP1002
TP1003
9
10
11
12
13
14
15
16

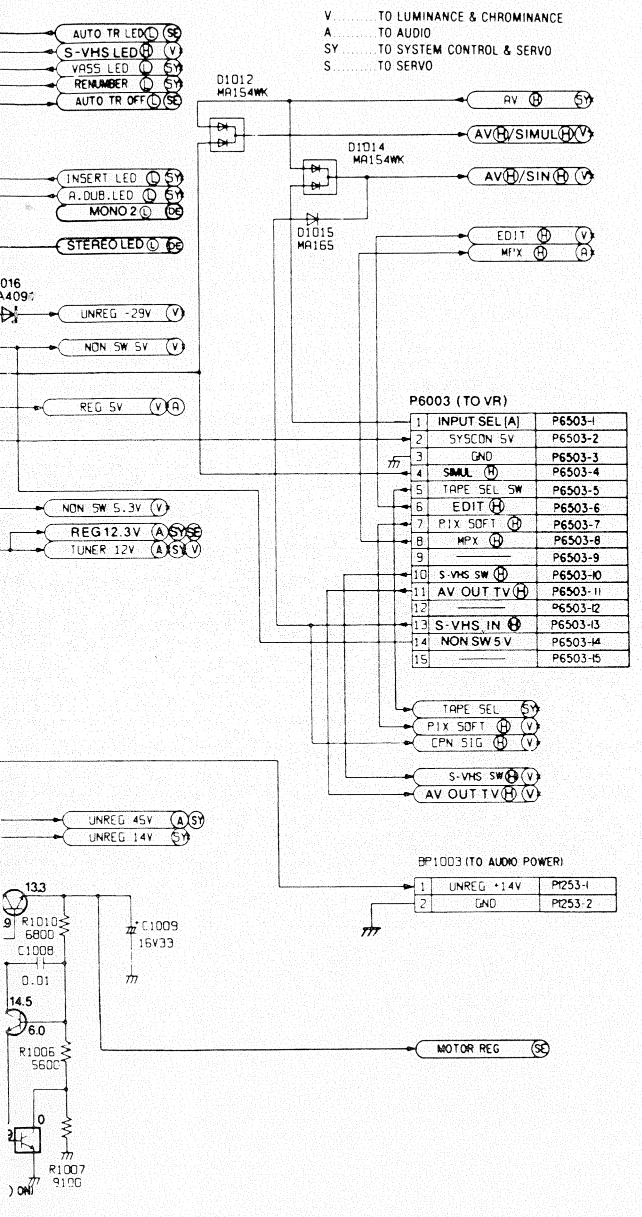
NOTE 1. WHEN MEASURE THE VOLTAGE OR WAVEFORM ON THE POWER TRANSFORMER CIRCUIT, SET THE GND TERMINAL OF MEASURING POINT AS FOLLOWS.
PRIMARY SIDE ..... IC1101-(4)
SECONDARY SIDE .... TP GND OF MAIN C.B.A.

NOTE 2. THE DC VOLTAGE INDICATED IN PRIMARY SIDE IS SHOWN THE VOLTAGE WHEN INPUT AC IS 220V.

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.


B
A
1
C1108
R1101
L1102
C1101
L1101
F1101
P1102


V........TO LUMINANCE & CHROMINANCE
A........TO AUDIO
SY........TO SYSTEM CONTROL & SERVO
S........TO SERVO
AUTO TR LED L SE
S-VHS LED H V
VASS LED L SY
RENUMBER L SY
AUTO TR OFF L SE
D1012
MA154WK
AV H SY
AV H/SIMUL H V
D1014
MA154WK
AV H/SIN H V
INSERT LED L SY
A.DUB.LED L SY
MONO 2 L DE
D1015
MA165
EDIT H V
MPX H A
STEREO LED L DE
016
A409
UNREG -29V V
NON SW 5V V
REG 5V V A
P6003 (TO VR)
1 INPUT SEL [A] P6503-1
2 SYSCON 5V P6503-2
3 GND P6503-3
4 SIMUL H P6503-4
5 TAPE SEL SW P6503-5
6 EDIT H P6503-6
7 PIX SOFT H P6503-7
8 MPX H P6503-8
9 P6503-9
10 S-VHS SW H P6503-10
11 AV OUT TV H P6503-11
12 P6503-12
13 S-VHS IN H P6503-13
14 NON SW 5 V P6503-14
15 P6503-15
NON SW 5.3V V
REG 12.3V A SY SE
TUNER 12V A SY V
TAPE SEL SY
PIX SOFT H V
CPN SIG H V
S-VHS SW H V
AV OUT TV H V
UNREG 45V A SY
UNREG 14V SY
BP1003 (TO AUDIO POWER)
1 UNREG +14V P1253-1
2 GND P1253-2
13.3
R1010
6800
C1009
16V33
C1008
0.01
14.5
6.0
R1006
5600
MOTOR REG SE
0
R1007
9100
ON

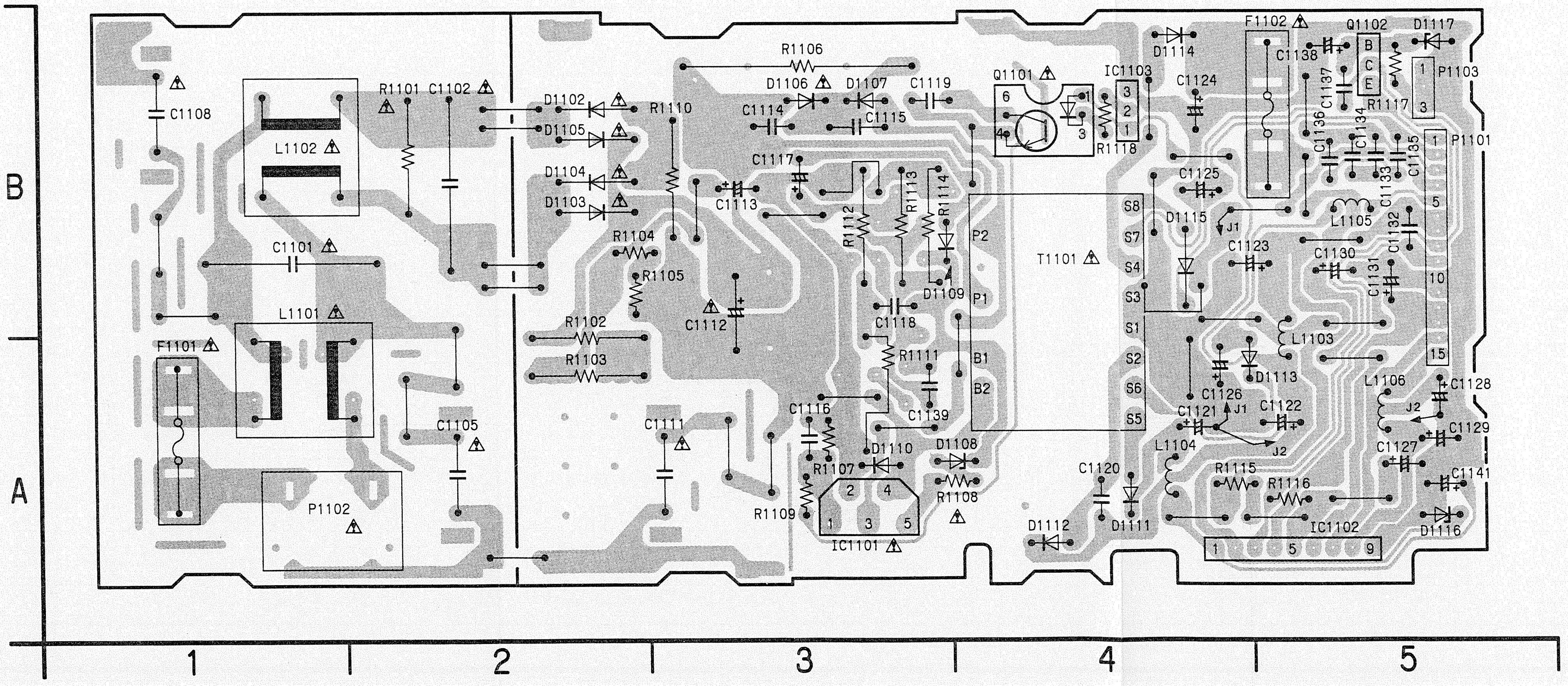
OTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

15
16

3-9. POWER C.B.A. (VEP01381H)

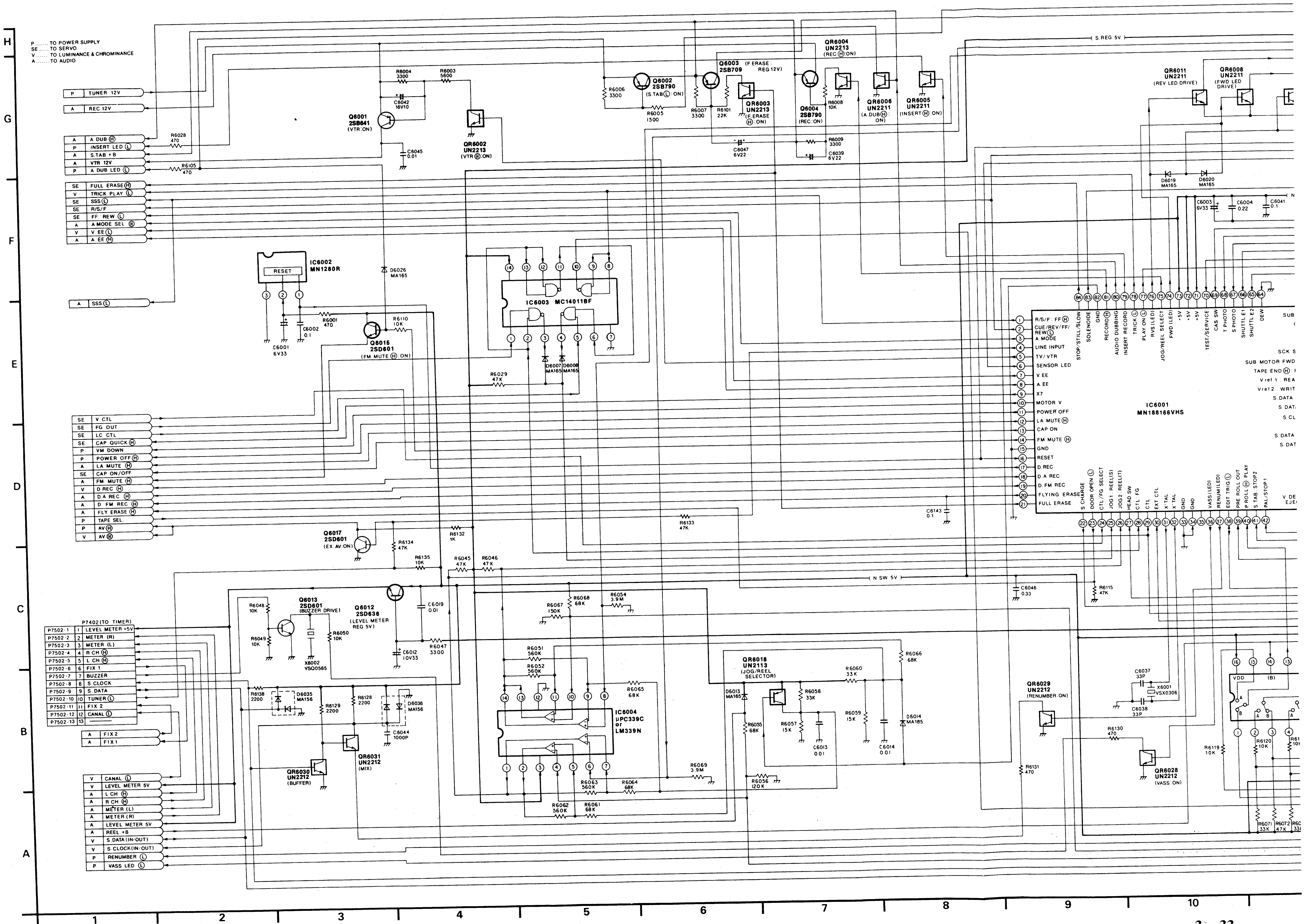
POWER C.B.A.	
Transistor	
Q1101	B-4
Q1102	B-5
Integrated Circuit	
IC1101	A-3
IC1102	A-5
IC1103	B-4
Connector	
P1101	B-5
P1102	A-1
P1103	B-5

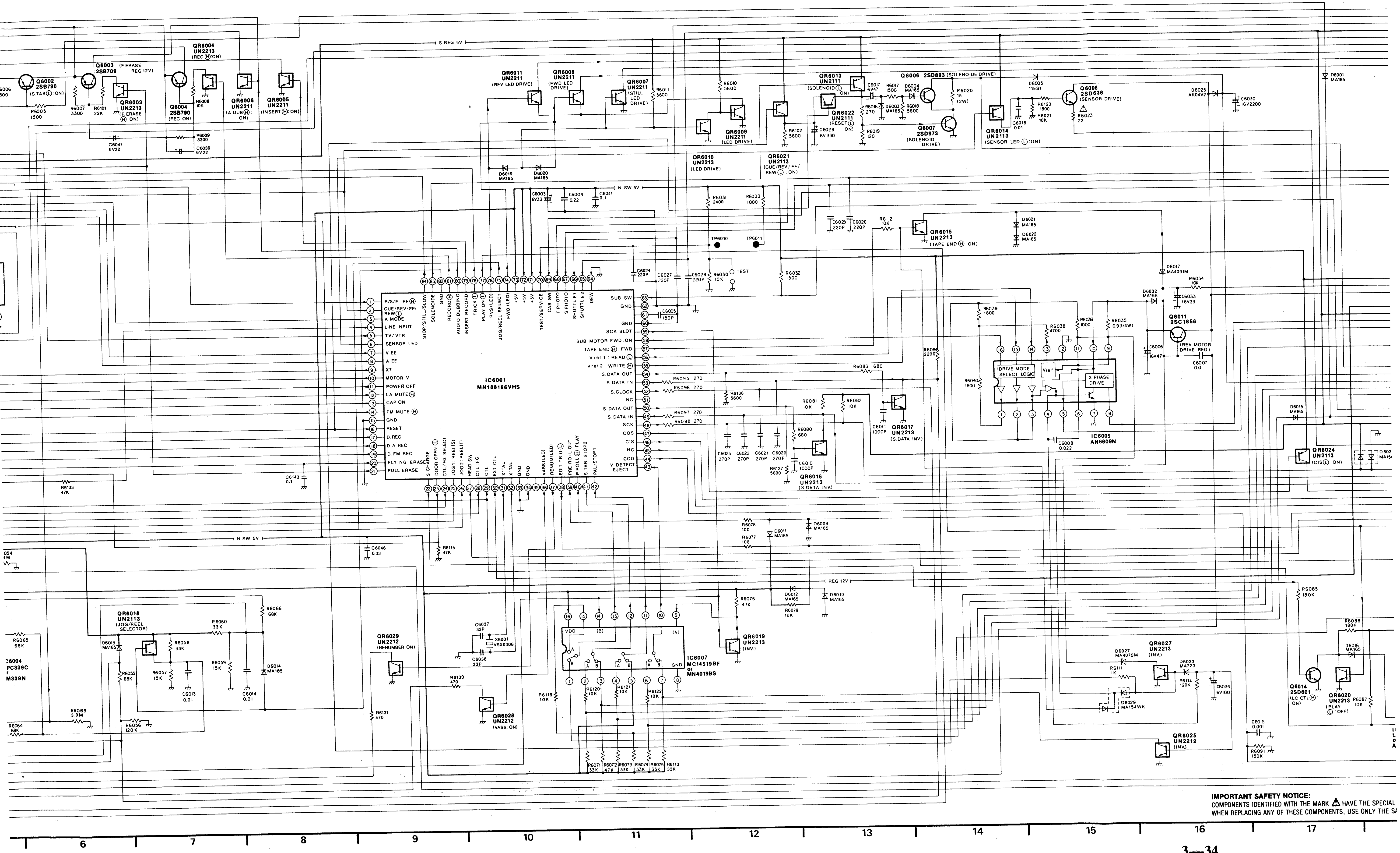
ADDRESS INFORMATION


B
A
1
2
3
4
5
C1108
L1102
R1101
C1102
C1101
L1101
F1101
C1105
P1102
D1102
D1105
D1104
D1103
R1110
R1106
D1106
D1107
C1119
C1114
C1115
C1117
C1113
R1104
R1105
R1102
R1103
C1112
C1111
R1112
R1113
R1114
C1118
R1111
D1109
C1139
C1116
R1107
D1110
D1108
R1108
R1109
IC1101
Q1101
IC1103
R1118
T1101
P2
P1
B1
B2
S8
S7
S4
S3
S1
S2
S6
S5
C1124
D1114
C1125
D1115
J1
C1123
D1113
C1126
C1121
C1122
J2
L1104
C1120
D1111
D1112
R1115
R1116
IC1102
F1102
Q1102
D1117
C1138
B
C
E
R1117
P1103
P1101
C1137
C1136
C1134
C1133
C1135
L1105
C1132
C1130
C1131
L1103
L1106
C1128
C1129
C1127
C1141
D1116
1
5
9
10
15

Next Page:
SYSTEM CONTROL Section

3-10. SYSTEM CONTROL SCHEMATIC DIAGRAM


P...... TO POWER SUPPLY
SE..... TO SERVO
V....... TO LUMINANCE & CHROMINANCE
A....... TO AUDIO
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
P TUNER 12V
A REC 12V
A A DUB Ⓗ
P INSERT LED Ⓛ
A S.TAB +B
A VTR 12V
P A DUB LED Ⓛ
SE FULL ERASE Ⓗ
V TRICK PLAY Ⓛ
SE SSS Ⓛ
SE R/S/F
SE FF REW Ⓛ
A A MODE SEL Ⓗ
V V EE Ⓛ
A A EE Ⓗ
A SSS Ⓛ
SE V CTL
SE FG OUT
SE LC CTL
SE CAP QUICK Ⓗ
P VM DOWN
P POWER OFF Ⓗ
A LA MUTE Ⓗ
SE CAP ON/OFF
A FM MUTE Ⓗ
V D REC Ⓗ
A D.A REC Ⓗ
A D FM REC Ⓗ
A FLY ERASE Ⓗ
P TAPE SEL
P AV Ⓗ
V AV Ⓗ
P7402 (TO TIMER)
P7502·1 1 LEVEL METER +5V
P7502·2 2 METER (R)
P7502·3 3 METER (L)
P7502·4 4 R CH Ⓗ
P7502·5 5 L CH Ⓗ
P7502·6 6 FIX 1
P7502·7 7 BUZZER
P7502·8 8 S.CLOCK
P7502·9 9 S.DATA
P7502·10 10 TUNER Ⓛ
P7502·11 11 FIX 2
P7502·12 12 CANAL Ⓛ
P7502·13 13
A FIX 2
A FIX 1
V CANAL Ⓛ
V LEVEL METER 5V
A L CH Ⓗ
A R CH Ⓗ
A METER (L)
A METER (R)
A LEVEL METER 5V
A REEL +B
V S.DATA (IN/OUT)
V S.CLOCK (IN/OUT)
P RENUMBER Ⓛ
P VASS LED Ⓛ
S.REG 5V
N SW 5V
R6004 3300
R6003 5600
C6042 16V10
Q6001 2SB641 (VTR:ON)
C6045 0.01
QR6002 UN2213 (VTR Ⓗ:ON)
R6028 470
R6105 470
R6006 3300
Q6002 2SB790 (S.TAB Ⓛ:ON)
R6005 1500
Q6003 2SB709 (F.ERASE REG 12V)
R6007 3300
R6101 22K
QR6003 UN2213 (F.ERASE Ⓗ:ON)
C6047 6V22
Q6004 2SB790 (REC:ON)
R6008 10K
QR6004 UN2213 (REC Ⓗ:ON)
QR6006 UN2211 (A.DUB Ⓗ:ON)
QR6005 UN2211 (INSERT Ⓗ:ON)
R6009 3300
C6039 6V22
QR6011 UN2211 (REV LED DRIVE)
QR6008 UN2211 (FWD LED DRIVE)
D6019 MA165
D6020 MA165
C6003 6V33
C6004 0.22
C6041 0.1
IC6002 MN1280R
RESET
C6001 6V33
C6002 0.1
R6001 470
D6026 MA165
R6110 10K
Q6015 2SD601 (FM MUTE Ⓗ:ON)
IC6003 MC14011BF
R6029 47K
D6007 MA165
D6008 MA165
Q6017 2SD601 (EX-AV:ON)
R6134 47K
R6132 1K
R6135 10K
R6045 47K
R6046 47K
R6133 47K
C6143 0.1
R6048 10K
Q6013 2SD601 (BUZZER DRIVE)
Q6012 2SD636 (LEVEL METER REG 5V)
C6019 0.01
R6049 10K
R6050 10K
X6002 VSQ0565
C6012 10V33
R6047 3300
R6067 150K
R6068 68K
R6054 3.9M
R6051 560K
R6052 560K
R6065 68K
IC6004 μPC339C or LM339N
R6069 3.9M
R6063 560K
R6064 68K
R6062 560K
R6061 68K
R6138 2200
D6035 MA156
R6129 2200
R6128 2200
D6036 MA156
C6044 1000P
QR6030 UN2212 (BUFFER)
QR6031 UN2212 (MIX)
QR6018 UN2113 (JOG/REEL SELECTOR)
D6013 MA165
R6055 68K
R6058 33K
R6057 15K
C6013 0.01
R6060 33K
R6059 15K
C6014 0.01
R6066 68K
D6014 MA165
R6056 120K
C6046 0.33
R6115 47K
QR6029 UN2212 (RENUMBER:ON)
R6131 470
R6130 470
QR6028 UN2212 (VASS:ON)
C6037 33P
X6001 VSX0306
C6038 33P
R6119 10K
R6120 10K
R6071 33K
R6072 47K
IC6001 MN188166VHS
R/S/F : FF Ⓗ
CUE/REV/FF/REW Ⓛ
A MODE
LINE INPUT
TV/VTR
SENSOR LED
V.EE
A.EE
X7
MOTOR V
POWER OFF
LA MUTE Ⓗ
CAP ON
FM MUTE Ⓗ
GND
RESET
D.REC
D.A REC
D.FM REC
FLYING ERASE
FULL ERASE
STOP/STILL/SLOW
SOLENOIDE
GND
RECORD Ⓗ
AUDIO DUBBING
INSERT RECORD
TRICK Ⓛ
PLAY ON Ⓛ
RVS(LED)
JOG/REEL SELECT
FWD (LED)
+5V
+5V
+5V
TEST/SERVICE
CAS SW
T PHOTO
S PHOTO
SHUTTLE E1
SHUTTLE E2
DEW
S.CHARGE
DOOR OPEN Ⓛ
CTL/FG SELECT
JOG1 REEL(S)
JOG2 REEL(T)
HEAD SW
CTL FG
CTL
EXT CTL
X TAL
X TAL
GND
GND
VASS(LED)
RENUM(LED)
EDIT TRIG Ⓛ
PRE ROLL OUT
P ROLL Ⓗ PLAY
S.TAB STOP2
PAL/STOP1
SCK S
SUB MOTOR FWD
TAPE END Ⓗ
Vref 1 REA
Vref 2 WRIT
S.DATA
S.DAT
S.CL
S.DATA
S.DAT
V DE
EJE
SUB
VDD
(B)


S.REG 5V
N SW 5V
REG 12V
Q6002 2SB790 (S.TAB Ⓛ : ON)
Q6003 2SB709 (F.ERASE: REG 12V)
QR6003 UN2213 (F.ERASE Ⓗ: ON)
Q6004 2SB790 (REC: ON)
QR6004 UN2213 (REC Ⓗ: ON)
QR6006 UN2211 (A.DUB Ⓗ: ON)
QR6005 UN2211 (INSERT Ⓗ: ON)
QR6011 UN2211 (REV LED DRIVE)
QR6008 UN2211 (FWD LED DRIVE)
QR6007 UN2211 (STILL LED DRIVE)
QR6009 UN2211 (LED DRIVE)
QR6010 UN2213 (LED DRIVE)
QR6013 UN2111 (SOLENOID Ⓛ: ON)
QR6022 UN2111 (RESET Ⓛ: ON)
QR6021 UN2113 (CUE/REV/FF/REW Ⓛ: ON)
Q6006 2SD893 (SOLENOIDE DRIVE)
Q6007 2SD973 (SOLENOID DRIVE)
QR6014 UN2113 (SENSOR LED Ⓛ: ON)
Q6008 2SD636 (SENSOR DRIVE)
QR6015 UN2213 (TAPE END Ⓗ: ON)
TP6010
TP6011
TEST
IC6001 MN188166VHS
R/S/F: FF Ⓗ
CUE/REV/FF/REW Ⓛ
A MODE
LINE INPUT
TV/VTR
SENSOR LED
V.EE
A.EE
X7
MOTOR V
POWER OFF
LA MUTE Ⓗ
CAP ON
FM MUTE Ⓗ
GND
RESET
D.REC
D.A.REC
D.FM REC
FLYING ERASE
FULL ERASE
STOP/STILL/SLOW
SOLENOIDE
RECORD
AUDIO DUBBING
INSERT RECORD
TRICK Ⓛ
PLAY ON Ⓛ
RVS (LED)
JOG/REEL SELECT
FWD (LED)
+5V
TEST/SERVICE
CAS SW
T.PHOTO
S.PHOTO
SHUTTL E1
SHUTTL E2
DEW
SUB SW
SCK SLOT
SUB MOTOR FWD: ON
TAPE END Ⓗ: FWD
Vref 1: READ Ⓛ
Vref 2: WRITE Ⓗ
S.DATA OUT
S.DATA IN
S.CLOCK
NC
SCK
COS
CIS
HC
CCD
V.DETECT
EJECT
S.CHARGE
DOOR OPEN Ⓛ
CTL/FG SELECT
JOG 1: REEL (S)
JOG 2: REEL (T)
HEAD SW
CTL FG
CTL
EXT CTL
X TAL
VASS (LED)
RENUM (LED)
EDIT TRIG Ⓛ
PRE ROLL OUT
P.ROLL Ⓗ PLAY
S.TAB STOP 2
PAL/STOP 1
QR6017 UN2213 (S.DATA INV)
QR6016 UN2213 (S.DATA INV)
IC6005 AN6609N
DRIVE MODE SELECT LOGIC
Vref
3 PHASE DRIVE
Q6011 2SC1856 (REV MOTOR DRIVE REG)
QR6024 UN2113 (CIS Ⓛ: ON)
QR6018 UN2113 (JOG/REEL SELECTOR)
QR6029 UN2212 (RENUMBER: ON)
QR6028 UN2212 (VASS: ON)
X6001 VSX0306
IC6007 MC14519BF or MN4019BS
VDD
GND
QR6019 UN2213 (INV.)
QR6027 UN2213 (INV.)
QR6025 UN2212 (INV.)
Q6014 2SD601 (LC CTL Ⓗ: ON)
QR6020 UN2213 (PLAY Ⓛ: OFF)
IC6004 PC339C or M339N
6
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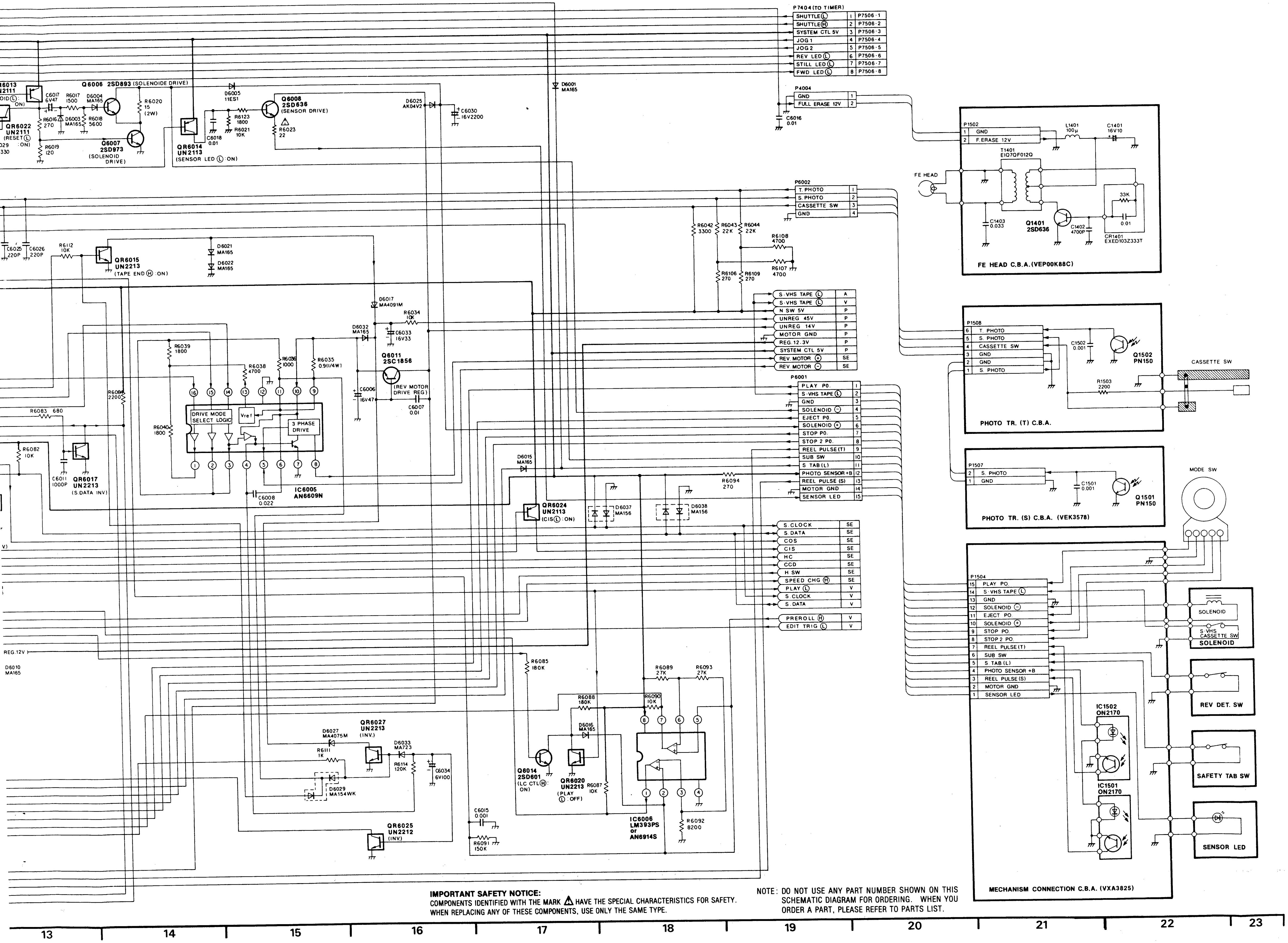
IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE S


P7404 (TO TIMER)
SHUTTLE Ⓛ 1 P7506-1
SHUTTLE Ⓗ 2 P7506-2
SYSTEM CTL 5V 3 P7506-3
JOG 1 4 P7506-4
JOG 2 5 P7506-5
REV LED Ⓛ 6 P7506-6
STILL LED Ⓛ 7 P7506-7
FWD LED Ⓛ 8 P7506-8
P4004
GND 1
FULL ERASE 12V 2
Q6006 2SD893 (SOLENOIDE DRIVE)
Q6007 2SD973 (SOLENOID DRIVE)
QR6022 UN2111 (RESET Ⓛ :ON)
Q6008 2SD636 (SENSOR DRIVE)
QR6014 UN2113 (SENSOR LED Ⓛ :ON)
D6025 AK04V2
C6030 16V2200
D6001 MA165
C6016 0.01
P1502
1 GND
2 F.ERASE 12V
L1401 100μ
C1401 16V10
T1401 EIQ7QF012Q
FE HEAD
Q1401 2SD636
C1403 0.033
C1402 4700P
CR1401 EXED103Z333T
33K
0.01
FE HEAD C.B.A. (VEP00K88C)
P6002
T. PHOTO 1
S. PHOTO 2
CASSETTE SW 3
GND 4
R6042 3300
R6043 22K
R6044 22K
R6108 4700
R6107 4700
R6106 270
R6109 270
QR6015 UN2213 (TAPE END Ⓗ :ON)
R6112 10K
C6025 220P
C6026 220P
D6021 MA165
D6022 MA165
S-VHS TAPE Ⓛ A
S-VHS TAPE Ⓛ V
N SW 5V P
UNREG 45V P
UNREG 14V P
MOTOR GND P
REG 12.3V P
SYSTEM CTL 5V P
REV. MOTOR ⊕ SE
REV. MOTOR ⊖ SE
D6017 MA4091M
R6034 10K
D6032 MA165
C6033 16V33
Q6011 2SC1856 (REV MOTOR DRIVE REG)
C6006 16V47
C6007 0.01
R6039 1800
R6038 4700
R6036 1000
R6035 0.9(1/4W)
R6086 2200
R6040 1800
DRIVE MODE SELECT LOGIC
Vref
3 PHASE DRIVE
C6008 0.022
IC6005 AN6609N
R6083 680
R6082 10K
C6011 1000P
QR6017 UN2213 (S.DATA INV)
P1508
6 T. PHOTO
5 S. PHOTO
4 CASSETTE SW
3 GND
2 GND
1 S. PHOTO
C1502 0.001
Q1502 PN150
R1503 2200
CASSETTE SW
PHOTO TR. (T) C.B.A.
P6001
PLAY PO. 1
S-VHS TAPE Ⓛ 2
GND 3
SOLENOID ⊖ 4
EJECT PO. 5
SOLENOID ⊕ 6
STOP PO. 7
STOP 2 PO. 8
REEL PULSE(T) 9
SUB SW 10
S TAB (L) 11
PHOTO SENSOR +B 12
REEL PULSE (S) 13
MOTOR GND 14
SENSOR LED 15
D6015 MA165
R6094 270
QR6024 UN2113 (CIS Ⓛ :ON)
D6037 MA156
D6038 MA156
P1507
2 S. PHOTO
1 GND
C1501 0.001
Q1501 PN150
PHOTO TR. (S) C.B.A. (VEK3578)
MODE SW
S.CLOCK SE
S.DATA SE
COS SE
CIS SE
HC SE
CCD SE
H SW SE
SPEED CHG Ⓗ SE
PLAY Ⓛ V
S.CLOCK V
S. DATA V
PREROLL Ⓗ V
EDIT TRIG Ⓛ V
REG.12V
D6010 MA165
P1504
15 PLAY PO.
14 S-VHS TAPE Ⓛ
13 GND
12 SOLENOID ⊖
11 EJECT PO.
10 SOLENOID ⊕
9 STOP PO.
8 STOP 2 PO.
7 REEL PULSE (T)
6 SUB SW
5 S. TAB (L)
4 PHOTO SENSOR +B
3 REEL PULSE (S)
2 MOTOR GND
1 SENSOR LED
SOLENOID
S-VHS CASSETTE SW
SOLENOID
REV DET. SW
SAFETY TAB SW
SENSOR LED
IC1502 ON2170
IC1501 ON2170
MECHANISM CONNECTION C.B.A. (VXA3825)
R6085 180K
R6088 180K
R6089 27K
R6093 27K
R6090 10K
D6016 MA165
Q6014 2SD601 (LC CTL Ⓗ :ON)
QR6020 UN2213 (PLAY Ⓛ :OFF)
R6087 10K
IC6006 LM393PS or AN6914S
R6092 8200
C6015 0.001
R6091 150K
D6027 MA4075M
QR6027 UN2213 (INV.)
R6111 1K
D6033 MA723
R6114 120K
C6034 6V100
D6029 MA154WK
QR6025 UN2212 (INV.)
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IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

SYSTEM CONTROL ICs DC VOLTAGE CHART (S-VHS: SP MODE)

REF. NO.	IC6001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	2.1	4.9	0	4.9	0	4.4	0.1	4.9	0	4.9	0	0	0	0	0	4.6	0.1	0	0	0
PLAY	0	4.9	0	4.9	4.9	4.4	4.9	0	0	0	0	0	4.9	0	0	4.6	0.1	0	0	0
FF	0	0	0	4.9	4.9	4.4	0.1	4.9	4.9	4.9	0	0	4.9	0	0	5.0	0.1	0	0	0

REF. NO.	IC6001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	0	0	0	0	4.8	4.8	0	5.1	0.1	5.1	—	—	0	0	4.9	0	0	4.9	0	1.0
PLAY	0	0	0	0	4.8	4.8	3.0	2.6	3.0	3.4	—	—	0	0	4.9	0	0	4.9	0	0
FF	0	0	0	0	2.6	2.5	0	2.1	4.4	5.1	—	—	0	0	4.9	0	0	4.9	0	1.0

REF. NO.	IC6001																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	1.0	3.9	4.9	4.9	4.9	4.9	4.9	4.9	0.4	0.1	0	4.6	4.5	0.2	4.9	4.9	4.9	0	3.9	0
PLAY	1.0	4.9	4.9	4.9	4.9	4.9	4.9	4.9	0.4	0.2	0	4.6	4.4	0.2	4.9	4.9	4.9	0	3.9	0
FF	1.0	3.9	4.9	4.9	4.9	4.9	4.9	4.9	0.4	0.1	0	4.6	4.5	0.2	4.9	4.9	4.9	0	3.9	0

REF. NO.	IC6001																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
STOP	3.9	0	0	0	3.3	4.6	4.6	4.7	2.0	4.0	4.9	4.9	4.9	0	0	0	4.9	4.9	0	0
PLAY	3.8	0	0	0	3.3	4.6	4.6	4.7	2.0	4.0	4.9	4.9	4.9	0	0	0	0.1	4.9	0	0
FF	3.9	0	0	0	3.3	4.6	4.6	4.7	2.0	4.0	4.9	4.9	4.9	0	0	0	4.9	4.9	0	0

REF. NO.	IC6001										IC6002									
MODE	81	82	83	84							1	2	3							
STOP	0	0	4.9	4.9							4.6	4.9	0							
PLAY	0	0	4.9	4.9							4.6	4.9	0							
FF	0	0	4.9	4.9							5.0	5.0	0							

REF. NO.	IC6003																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	5.1	0	5.1	0	5.1	5.1	0	4.9	4.9	0	5.1	0	0	5.1						
PLAY	2.7	0	5.1	2.4	3.6	5.1	0	4.9	4.9	0	5.1	0	0	5.1						
FF	2.4	0	5.1	2.2	2.8	5.1	0	4.9	4.9	0	5.1	0	0	5.1						

REF. NO.	IC6004																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
STOP	4.8	4.8	5.1	0.2	2.0	3.5	5.0	3.5	4.5	2.6	1.4	0	0	0						
PLAY	4.8	4.8	5.1	3.0	2.0	3.5	4.7	3.5	4.9	2.9	2.0	0	4.8	4.8						
FF	2.6	2.6	5.1	1.5	1.7	3.5	4.7	3.5	4.8	1.4	1.7	0	2.5	2.6						

REF. NO.	IC6005																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	7.8	8.1	8.1	1.2	5.9	5.9	0	5.9	8.2	8.2	8.2	0	7.0	4.9	4.9	0				
PLAY	7.8	8.1	8.1	1.2	5.9	5.9	0	5.9	8.3	8.3	8.3	0	7.0	4.9	4.9	0				
FF	7.8	8.1	8.1	1.2	5.9	5.9	0	5.9	8.3	8.3	8.3	0	7.0	4.9	4.9	0				

REF. NO.	IC6006																			
MODE	1	2	3	4	5	6	7	8												
STOP	5.1	0	0.7	0	0	2.9	0.1	5.1												
PLAY	3.0	1.1	0.7	0	1.0	2.9	0.1	5.1												
FF	5.1	0	0.7	0	0	2.9	0.1	5.1												

REF. NO.	IC6007																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	0.1	4.9	0.5	0	4.9	4.9	4.9	0	1.0	4.9	3.9	1.0	1.0	0	4.9	4.9				
PLAY	0.1	4.9	0.5	4.9	4.9	4.9	4.9	0	1.0	4.9	4.9	1.0	0	3.8	0	4.9				
FF	0.1	4.9	0.5	0	4.9	4.9	4.9	0	1.2	4.9	3.6	1.0	1.0	3.9	4.9	4.9				

SYSTEM CONTROL TRs DC VOLTAGE CHART (S-VHS: SP MODE)

REF. NO.	Q6001			Q6002			Q6003			Q6004			Q6006			Q6007		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP	12.3	1.0	12.3	12.2	12.2	11.5	12.2	0.2	12.2	12.2	0	12.2	13.5	13.5	5.3	0	13.5	0
PLAY	12.3	12.1	11.4	12.2	12.2	11.5	12.2	0.3	12.2	12.2	0	12.2	13.4	13.4	5.2	0	13.4	0
FF	12.3	12.1	11.4	12.2	12.2	11.5	12.2	0.2	12.2	12.2	0	12.2	13.5	13.5	5.3	0	13.5	0

REF. NO.	Q6008			Q6011			Q6012			Q6013			Q6014			Q6015		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP	0.6	13.5	0.4	8.2	13.5	9.4	4.9	5.0	5.7	0	0	0.7	0	0	0.6	−0.1	4.9	0
PLAY	0.6	13.4	0.4	8.3	13.4	9.4	4.9	5.0	5.7	0	0	0.7	0	1.2	0.4	−0.1	4.9	0
FF	0.6	13.5	0.6	8.3	13.5	9.4	4.9	5.0	5.7	0	0	0.7	0	0	0.4	−0.1	4.9	0

REF. NO.	Q6017																	
MODE	E	C	B															
STOP	0	0.1	0.7															
PLAY	0	0.1	0.7															
FF	0	0.1	0.7															

REF. NO.	QR6002			QR6003			QR6004			QR6005			QR6006			QR6007		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP	0	12.3	0	0	12.2	0	0	12.2	0	0	3.4	0	0	3.4	0	0	5.1	0.6
PLAY	0	0.1	4.9	0	12.2	0	0	12.2	0	0	3.4	0	0	3.4	0	0	5.0	0.6
FF	0	0.1	4.9	0	12.2	0	0	12.2	0	0	3.4	0	0	3.4	0	0	5.1	0.6

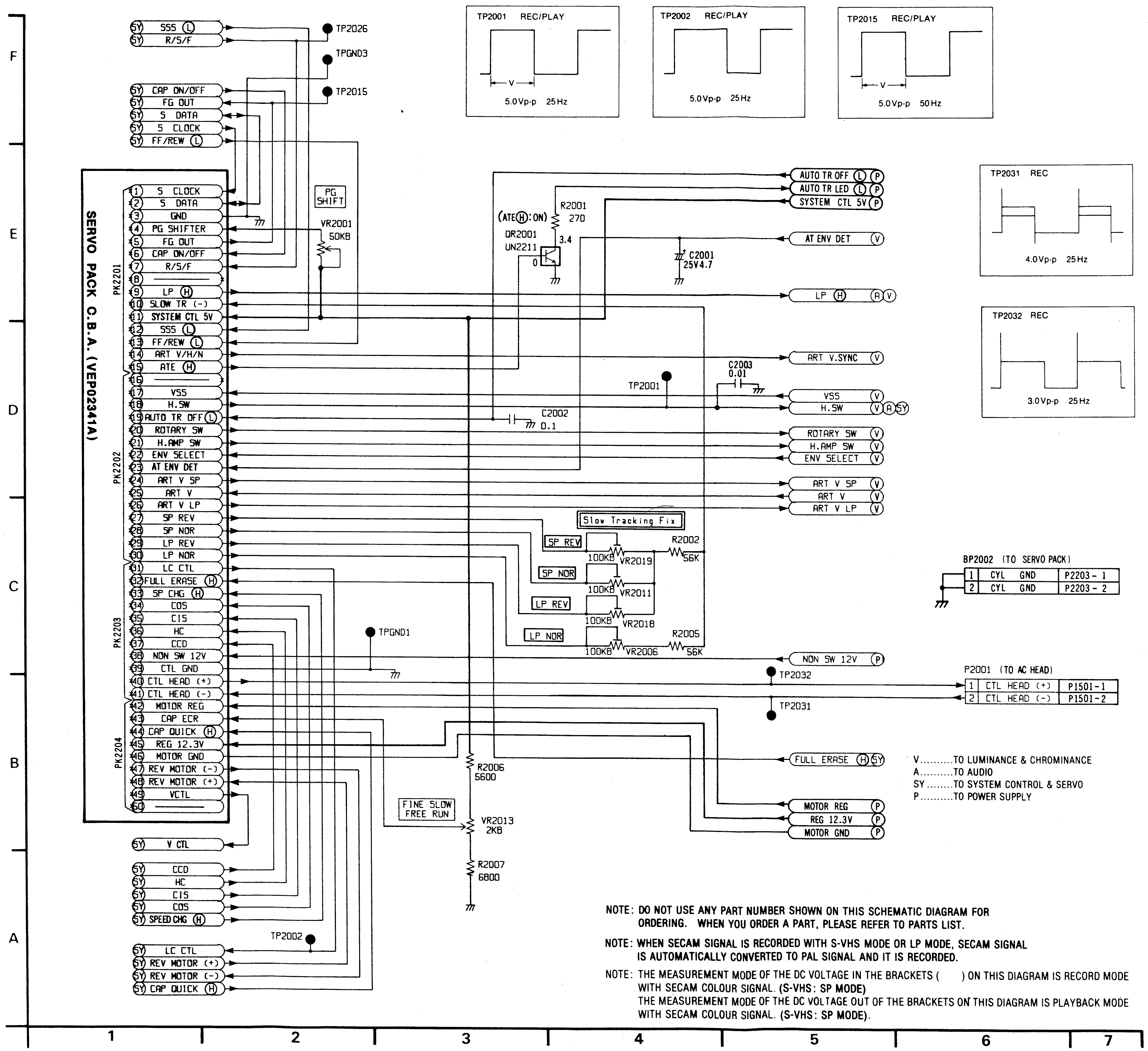
REF. NO.	QR6008			QR6009			QR6010			QR6011			QR6013			QR6014		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP	0	3.6	0	0	0	3.3	0	3.3	0.6	0	3.6	0	5.1	0	4.9	5.1	0.5	4.4
PLAY	0	3.5	0	0	0	3.3	0	3.3	0.6	0	3.6	0	5.1	0	4.9	5.1	0.5	4.4
FF	0	3.6	0	0	0	3.3	0	3.3	0.6	0	3.6	0	5.1	0	4.9	5.1	0.5	4.4

REF. NO.	QR6015			QR6016			QR6017			QR6018			QR6019			QR6020		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP	0	0.1	4.0	0	0.4	0.1	0	4.5	0.3	5.1	5.0	0	0	1.0	3.9	0	0	4.9
PLAY	0	0.1	4.0	0	0.4	0.2	0	4.5	0.2	5.1	5.0	0	0	1.0	3.8	0	1.0	0.1
FF	0	0.1	4.0	0	0.4	0.1	0	4.5	0.2	5.1	5.0	0	0	1.2	3.9	0	0	4.9

REF. NO.	QR6021			QR6022			QR6024			QR6025			QR6027			QR6028		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP	5.1	1.1	4.9	1.1	0	4.6	4.9	0	4.9	0	4.9	0.1	0	2.5	0	0	3.4	0
PLAY	5.1	1.0	4.9	1.0	0	4.6	4.9	0	4.9	0	4.9	0.1	0	2.6	0	0	3.4	0
FF	5.1	5.0	0	5.0	0	5.0	4.9	0	4.9	0	4.9	0.1	0	2.5	0	0	3.4	0

REF. NO.	QR6029			QR6030			QR6031											
MODE	E	C	B	E	C	B	E	C	B									
STOP	0	3.4	0	0	0.2	4.5	3.9	4.7	0.2									
PLAY	0	3.5	0	0	0.2	4.6	3.8	4.7	0.2									
FF	0	3.5	0	0	0.3	4.5	3.9	4.7	0.2									

3-11. SERVO SCHEMATIC DIAGRAM


SSS (L)
R/S/F
CAP ON/OFF
FG OUT
S DATA
S CLOCK
FF/REW (L)
TP2026
TPGND3
TP2015
SERVO PACK C.B.A. (VEP02341A)
PK2201
PK2202
PK2203
PK2204
1 S CLOCK
2 S DATA
3 GND
4 PG SHIFTER
5 FG OUT
6 CAP ON/OFF
7 R/S/F
8
9 LP (H)
10 SLOW TR (-)
11 SYSTEM CTL 5V
12 SSS (L)
13 FF/REW (L)
14 ART V/H/N
15 ATE (H)
16
17 VSS
18 H.SW
19 AUTO TR OFF (L)
20 ROTARY SW
21 H.AMP SW
22 ENV SELECT
23 AT ENV DET
24 ART V SP
25 ART V
26 ART V LP
27 SP REV
28 SP NOR
29 LP REV
30 LP NOR
31 LC CTL
32 FULL ERASE (H)
33 SP CHG (H)
34 COS
35 CIS
36 HC
37 CCD
38 NON SW 12V
39 CTL GND
40 CTL HEAD (+)
41 CTL HEAD (-)
42 MOTOR REG
43 CAP ECR
44 CAP QUICK (H)
45 REG 12.3V
46 MOTOR GND
47 REV MOTOR (-)
48 REV MOTOR (+)
49 VCTL
50
PG SHIFT
VR2001 50KB
(ATE(H):ON)
R2001 270
QR2001 UN2211
3.4
0
C2001 25V4.7
C2003 0.01
TP2001
C2002 0.1
TP2001 REC/PLAY
5.0Vp-p 25Hz
TP2002 REC/PLAY
5.0Vp-p 25Hz
TP2015 REC/PLAY
5.0Vp-p 50Hz
TP2031 REC
4.0Vp-p 25Hz
TP2032 REC
3.0Vp-p 25Hz
AUTO TR OFF (L) (P)
AUTO TR LED (L) (P)
SYSTEM CTL 5V (P)
AT ENV DET (V)
LP (H) (A)(V)
ART V.SYNC (V)
VSS (V)
H.SW (V)(A)(SY)
ROTARY SW (V)
H.AMP SW (V)
ENV SELECT (V)
ART V SP (V)
ART V (V)
ART V LP (V)
Slow Tracking Fix
SP REV
SP NOR
LP REV
LP NOR
100KB VR2019
100KB VR2011
100KB VR2018
100KB VR2006
R2002 56K
R2005 56K
NON SW 12V (P)
TP2032
TP2031
TPGND1
BP2002 (TO SERVO PACK)
1 CYL GND P2203-1
2 CYL GND P2203-2
P2001 (TO AC HEAD)
1 CTL HEAD (+) P1501-1
2 CTL HEAD (-) P1501-2
FULL ERASE (H)(SY)
MOTOR REG (P)
REG 12.3V (P)
MOTOR GND (P)
R2006 5600
FINE SLOW FREE RUN
VR2013 2KB
R2007 6800
V CTL
CCD
HC
CIS
COS
SPEED CHG (H)
TP2002
LC CTL
REV MOTOR (+)
REV MOTOR (-)
CAP QUICK (H)
SY
F
E
D
C
B
A
1
2
3
4
5
6
7

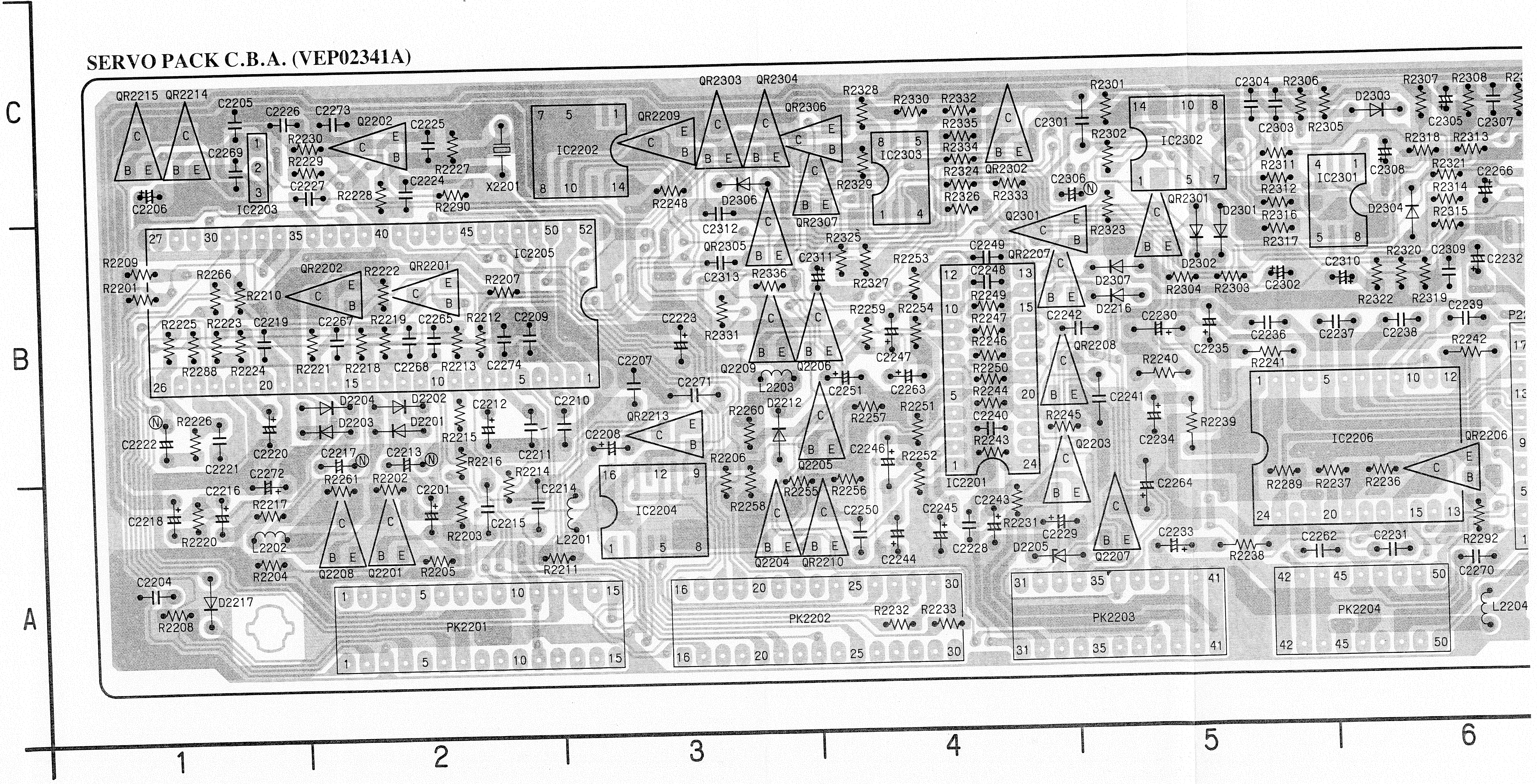
V..........TO LUMINANCE & CHROMINANCE
A..........TO AUDIO
SY........TO SYSTEM CONTROL & SERVO
P..........TO POWER SUPPLY

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

NOTE: WHEN SECAM SIGNAL IS RECORDED WITH S-VHS MODE OR LP MODE, SECAM SIGNAL IS AUTOMATICALLY CONVERTED TO PAL SIGNAL AND IT IS RECORDED.

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS (   ) ON THIS DIAGRAM IS RECORD MODE WITH SECAM COLOUR SIGNAL. (S-VHS: SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH SECAM COLOUR SIGNAL. (S-VHS: SP MODE).

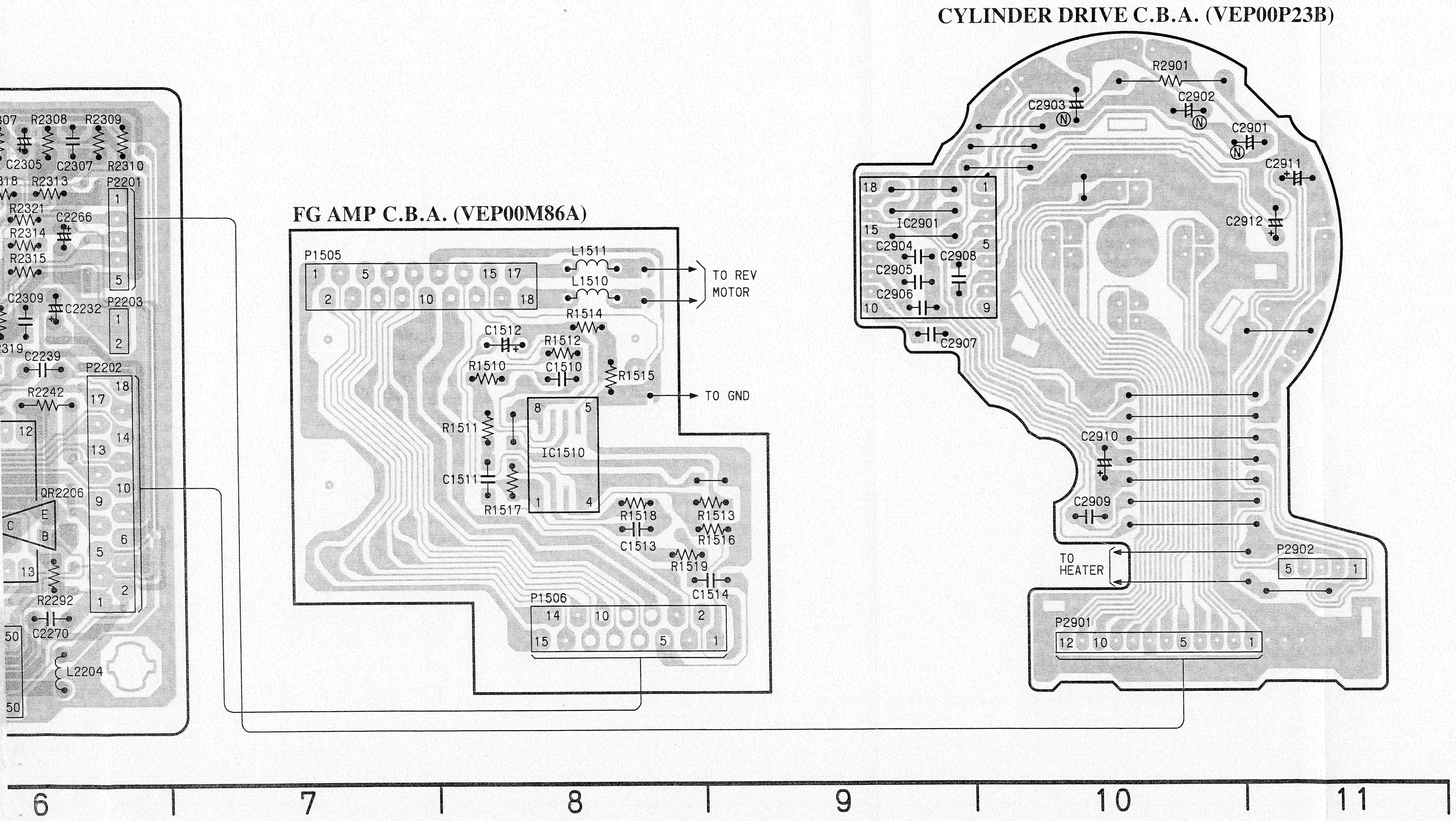
SERVO PACK C.B.A. (VEP02341A)


C
B
A
1
2
3
4
5
6
IC2201
IC2202
IC2203
IC2204
IC2205
IC2206
IC2301
IC2302
IC2303
PK2201
PK2202
PK2203
PK2204
X2201
L2201
L2202
L2203
L2204

Back Page:
SERVO Section

FG AMP C.B.A. (VEP00M86A)

CYLINDER DRIVE C.B.A. (VEP00P23B)


R2308
R2309
C2305
C2307
R2310
R2313
P2201
R2321
C2266
R2314
R2315
C2309
C2232
P2203
C2239
P2202
R2242
QR2206
R2292
C2270
L2204
P1505
L1511
L1510
TO REV MOTOR
R1514
C1512
R1512
R1510
C1510
R1515
TO GND
R1511
IC1510
C1511
R1517
R1518
R1513
C1513
R1516
R1519
C1514
P1506
R2901
C2903
C2902
C2901
C2911
IC2901
C2904
C2908
C2905
C2906
C2912
C2907
C2910
C2909
TO HEATER
P2902
P2901
6
7
8
9
10
11

SERVO PACK C.B.A.	
Transistor	
Q2201	A-2
Q2202	C-2
Q2203	B-5
Q2204	A-3
Q2205	B-3
Q2206	B-3
Q2207	A-5
Q2208	A-2
Q2209	B-3
Q2301	B-4
Transistor & Resistor	
QR2201	B-2
QR2202	B-2
QR2203	C-3
QR2204	C-3
QR2206	B-6
QR2207	B-4
QR2208	B-5
QR2209	C-3
QR2210	A-3
QR2213	B-3
QR2214	C-1
QR2215	C-1
QR2301	C-5
QR2302	C-4
QR2305	B-3
QR2306	C-4
QR2307	B-4
Integrated Circuit	
IC1510	B-8
IC2201	A-4
IC2202	C-3
IC2203	C-1
IC2204	A-3
IC2205	B-2
IC2206	B-6
IC2301	C-6
IC2302	C-5
IC2303	C-4
IC2901	C-9
Connector	
P1505	B-7
P1506	A-8
P2201	C-6
P2202	B-6
P2203	B-6
P2901	A-10
P2902	A-11
PK2201	A-2
PK2202	A-3
PK2203	A-5
PK2204	A-6

ADDRESS INFORMATION

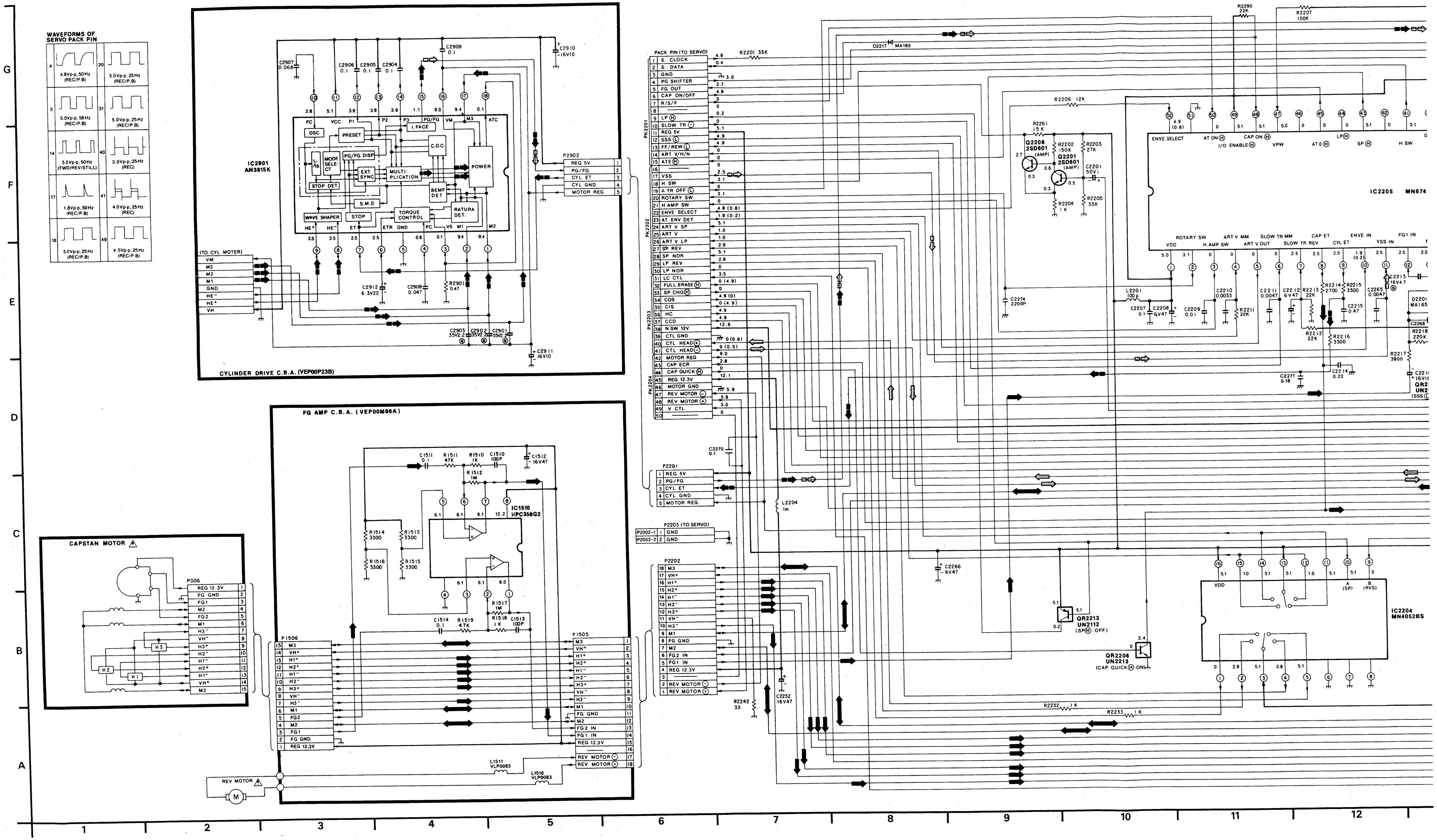
3-13. SERVO PACK SCHEMATIC DIAGRAM

CYLINDER SERVO PHASE LOOP

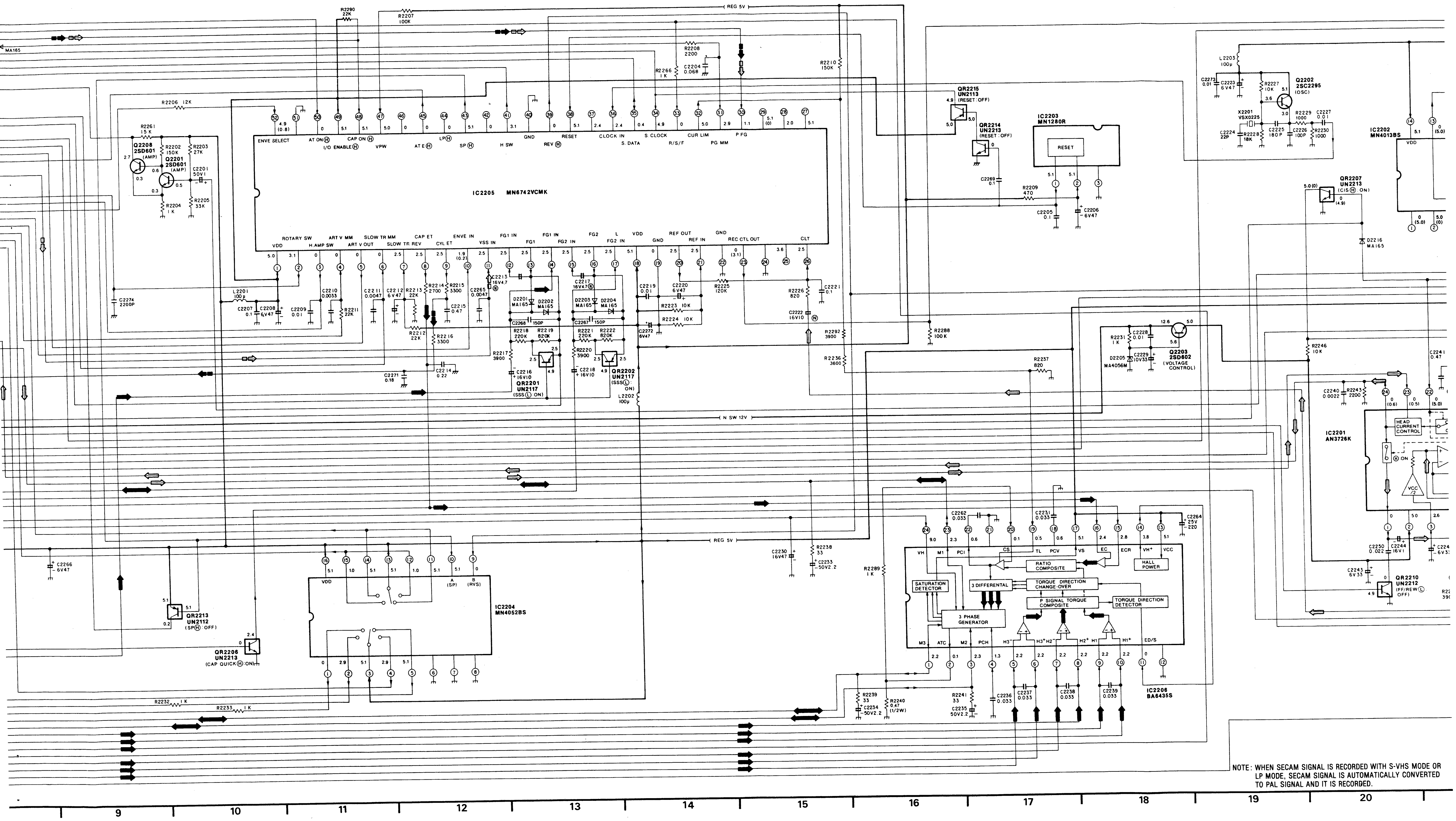
CAPSTAN SERVO PHASE LOOP

CYLINDER SERVO SPEED LOOP

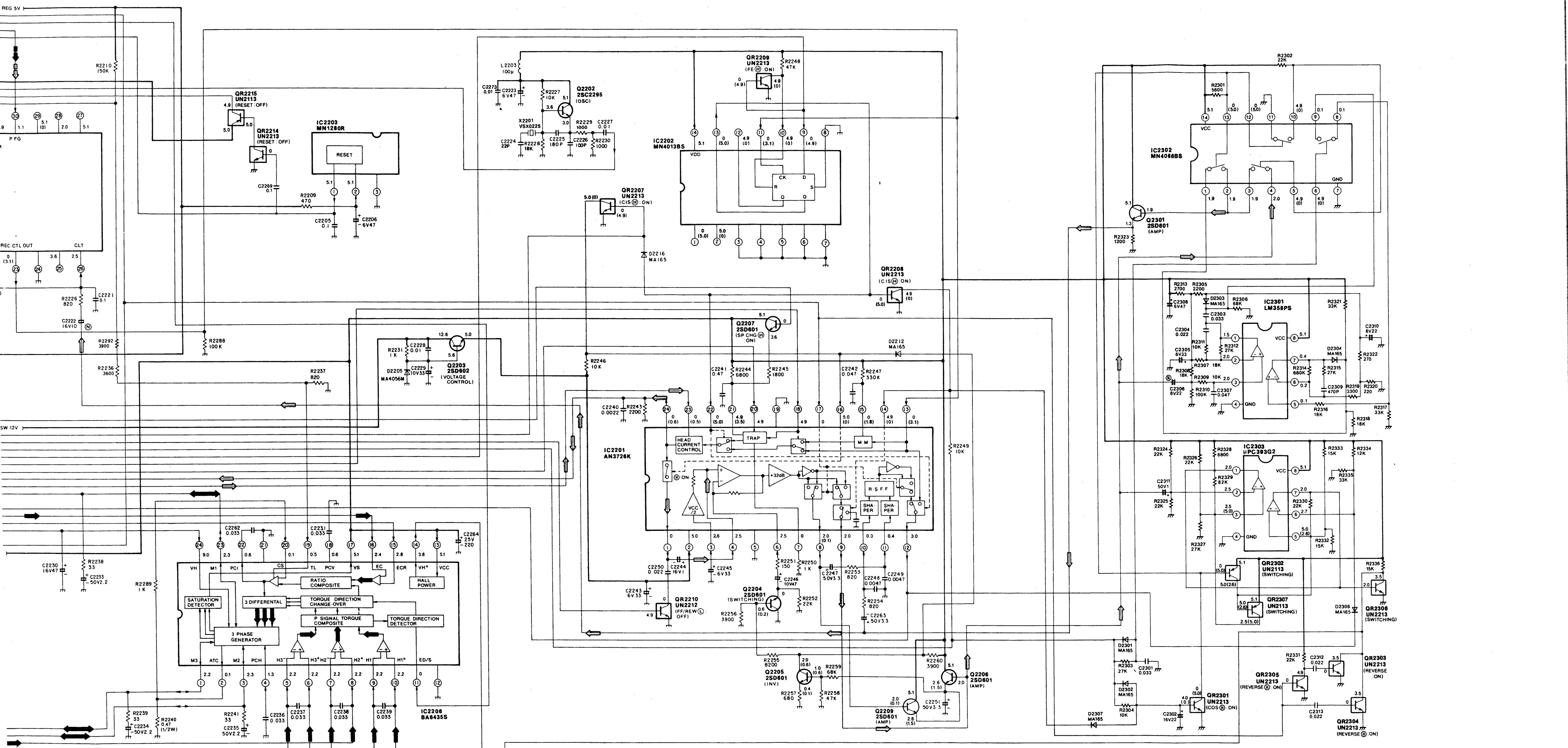
CAPSTAN SERVO SP


WAVEFORMS OF SERVO PACK PIN
4.8Vp-p, 50Hz (REC/P.B)
5.0Vp-p, 25Hz (REC/P.B)
5.0Vp-p, 58Hz (REC/P.B)
5.0Vp-p, 25Hz (REC/P.B)
5.0Vp-p, 50Hz (FWD/REV/STILL)
3.0Vp-p, 25Hz (REC)
1.8Vp-p, 50Hz (REC/P.B)
4.0Vp-p, 25Hz (REC)
5.0Vp-p, 25Hz (REC/P.B)
4.5Vp-p, 25Hz (REC/P.B)
IC2901 AN3815K
CYLINDER DRIVE C.B.A. (VEP00P23B)
FG AMP C.B.A. (VEP00M86A)
IC1510 µPC358G2
CAPSTAN MOTOR
REV MOTOR
P2902
P1506
P1505
P006
PACK PIN (TO SERVO)
P2201
P2203 (TO SERVO)
P2202
IC2205 MN674
IC2204 MN4052BS
Q2208 2SD601 (AMP)
Q2201 2SD601 (AMP)
QR2213 UN2112 (SP(H):OFF)
QR2206 UN2213 (CAP QUICK(H):ON)
D2217 MA165
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12

LOOP ◀■ CYLINDER SERVO SPEED LOOP ◀ CAPSTAN SERVO SPEED LOOP


REG 5V
N SW 12V
IC2205 MN6742VCMK
ENVE SELECT
AT ON Ⓗ
I/O ENABLE Ⓗ
CAP ON Ⓗ
VPW
AT E Ⓗ
LP Ⓗ
SP Ⓗ
H SW
GND
REV Ⓗ
RESET
CLOCK IN
S. DATA
S. CLOCK
R/S/F
CUR LIM
PG MM
P FG
VDD
ROTARY SW
H AMP SW
ART V MM
ART V OUT
SLOW TR MM
SLOW TR REV
CAP ET
CYL ET
ENVE IN
VSS IN
FG1 IN
FG1
FG2 IN
FG2
L
REF OUT
REF IN
REC CTL OUT
CLT
Q2208 2SD601 (AMP)
Q2201 2SD601 (AMP)
QR2201 UN2117 (SSS Ⓛ: ON)
QR2202 UN2117 (SSS Ⓛ: ON)
QR2215 UN2113 (RESET: OFF)
QR2214 UN2213 (RESET: OFF)
IC2203 MN1280R
RESET
Q2202 2SC2295 (OSC)
X2201 VSX0225
Q2203 2SD602 (VOLTAGE CONTROL)
D2205 MA4056M
QR2207 UN2213 (CIS Ⓗ: ON)
IC2202 MN4013BS
D2216 MA165
IC2201 AN3726K
HEAD CURRENT CONTROL
Ⓡ ON
VCC/2
QR2210 UN2212 (FF/REW Ⓛ: OFF)
IC2204 MN4052BS
VDD
A (SP)
B (RVS)
QR2213 UN2112 (SP Ⓗ: OFF)
QR2206 UN2213 (CAP QUICK Ⓗ: ON)
IC2206 BA6435S
VH
M1
PCI
CS
TL
PCV
VS
EC
ECR
VH+
VCC
RATIO COMPOSITE
HALL POWER
SATURATION DETECTOR
3 DIFFERENTIAL
TORQUE DIRECTION CHANGE-OVER
P SIGNAL TORQUE COMPOSITE
TORQUE DIRECTION DETECTOR
3 PHASE GENERATOR
M3
ATC
M2
PCH
H3-
H3+
H2-
H2+
H1-
H1+
ED/S
9
10
11
12
13
14
15
16
17
18
19
20

NOTE: WHEN SECAM SIGNAL IS RECORDED WITH S-VHS MODE OR LP MODE, SECAM SIGNAL IS AUTOMATICALLY CONVERTED TO PAL SIGNAL AND IT IS RECORDED.


REG 5V
SW 12V
R2210 150K
QR2215 UN2113 (RESET:OFF)
QR2214 UN2213 (RESET:OFF)
IC2203 MN1280R
RESET
R2209 470
C2269 0.1
C2205 0.1
C2206 6V47
PFG
REC CTL OUT
CLT
R2226 820
C2221 0.1
C2222 16V10
R2292 3900
R2236 3600
R2288 100K
R2237 820
L2203 100μ
C2273 0.01
C2223 6V47
R2227 10K
Q2202 2SC2295 (OSC)
X2201 VSX0225
C2224 22P
R2228 18K
C2225 180P
R2229 1000
C2226 100P
C2227 0.01
R2230 1000
QR2209 UN2213 (FE H : ON)
R2248 47K
IC2202 MN4013BS
VDD
CK
D
R
S
Q
QR2207 UN2213 (CIS H : ON)
D2216 MA165
R2231 1K
C2228 0.01
D2205 MA4056M
C2229 10V33
Q2203 2SD602 (VOLTAGE CONTROL)
R2246 10K
QR2208 UN2213 (CIS H : ON)
Q2207 2SD601 (SP CHG H : ON)
D2212 MA165
C2241 0.47
R2244 6800
R2245 1800
C2242 0.047
R2247 330K
C2240 0.0022
R2243 2200
IC2201 AN3726K
HEAD CURRENT CONTROL
TRAP
MM
+32dB
RSFF
SHA-PER
VCC/2
H ON
R2249 10K
C2250 0.022
C2244 16V1
C2245 6V33
C2243 6V33
QR2210 UN2212 (FF/REW L OFF)
Q2204 2SD601 (SWITCHING)
R2251 150
R2250 1K
C2246 10V47
R2252 22K
R2256 3900
C2247 50V3.3
R2253 820
C2248 0.0047
C2249 0.0047
R2254 820
C2263 50V3.3
R2255 8200
Q2205 2SD601 (INV)
R2259 68K
R2257 680
R2258 47K
R2260 3900
Q2206 2SD601 (AMP)
Q2209 2SD601 (AMP)
C2251 50V3.3
C2230 16V47
R2238 33
C2233 50V2.2
R2289 1K
C2262 0.033
C2231 0.033
C2264 25V 220
IC2206 BA6435S
VH M1 PCI CS TL PCV VS EC ECR VH+ VCC
RATIO COMPOSITE
HALL POWER
SATURATION DETECTOR
3 DIFFERENTIAL
TORQUE DIRECTION CHANGE OVER
P SIGNAL TORQUE COMPOSITE
TORQUE DIRECTION DETECTOR
3 PHASE GENERATOR
M3 ATC M2 PCH H3- H3+ H2- H2+ H1- H1+ ED/S
R2239 33
C2234 50V2.2
R2240 0.47 (1/2W)
R2241 33
C2235 50V2.2
C2236 0.033
C2237 0.033
C2238 0.033
C2239 0.033
R2302 22K
R2301 5600
IC2302 MN4066BS
VCC
GND
Q2301 2SD601 (AMP)
R2323 1200
R2313 2700
R2305 2200
C2308 6V47
D2303 MA165
R2306 68K
C2303 0.033
IC2301 LM358PS
R2321 33K
C2304 0.022
R2311 10K
R2312 27K
C2305 6V33
R2307 18K
R2308 18K
R2309 10K
R2310 100K
C2307 0.047
C2306 6V22
R2314 680K
R2315 27K
D2304 MA165
C2310 6V22
R2322 270
C2309 470P
R2319 3300
R2320 220
R2316 18K
R2317 33K
R2318 18K
R2324 22K
R2326 22K
R2328 6800
IC2303 μPC393G2
R2333 15K
R2334 12K
R2335 33K
C2311 50V1
R2329 82K
R2325 22K
R2330 22K
R2327 27K
R2332 15K
QR2302 UN2113 (SWITCHING)
QR2307 UN2113 (SWITCHING)
R2336 15K
D2306 MA165
QR2306 UN2213 (SWITCHING)
D2301 MA165
R2303 27K
C2301 0.033
D2302 MA165
R2304 10K
D2307 MA165
C2302 16V22
QR2301 UN2213 (COS R : ON)
QR2305 UN2213 (REVERSE H : ON)
R2331 22K
C2312 0.022
QR2303 UN2213 (REVERSE : ON)
C2313 0.022
QR2304 UN2213 (REVERSE R : ON)

NOTE: WHEN SECAM SIGNAL IS RECORDED WITH S-VHS MODE OR LP MODE, SECAM SIGNAL IS AUTOMATICALLY CONVERTED TO PAL SIGNAL AND IT IS RECORDED.

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS (   ) ON THIS DIAGRAM IS RECORD MODE WITH SECAM COLOUR SIGNAL.
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH SECAM COLOUR SIGNAL.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

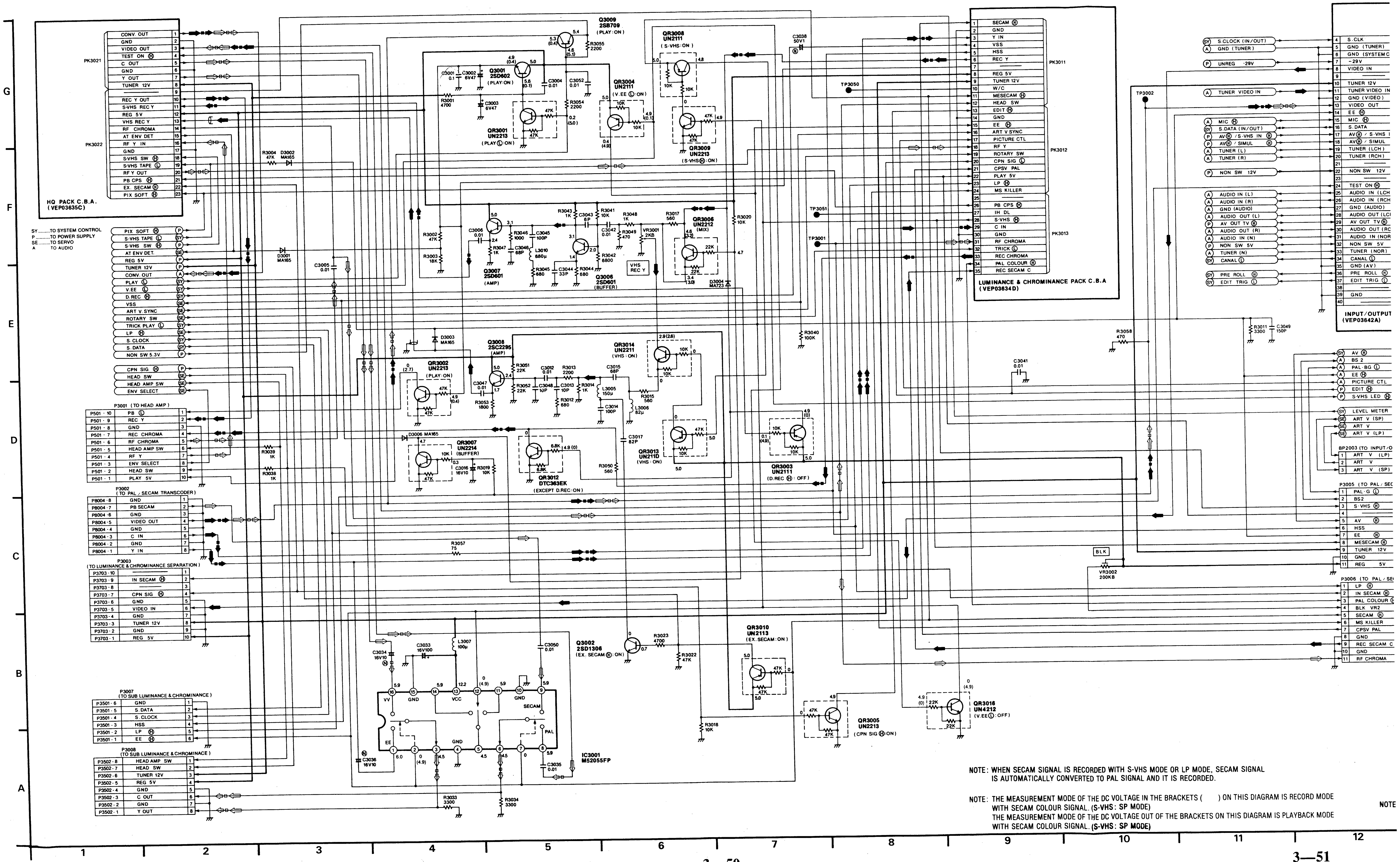
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26

Next Page:
LUMINANCE & CHROMINANCE
Section

3-14. LUMINANCE & CHROMINANCE SCHEMATIC DIAGRAM

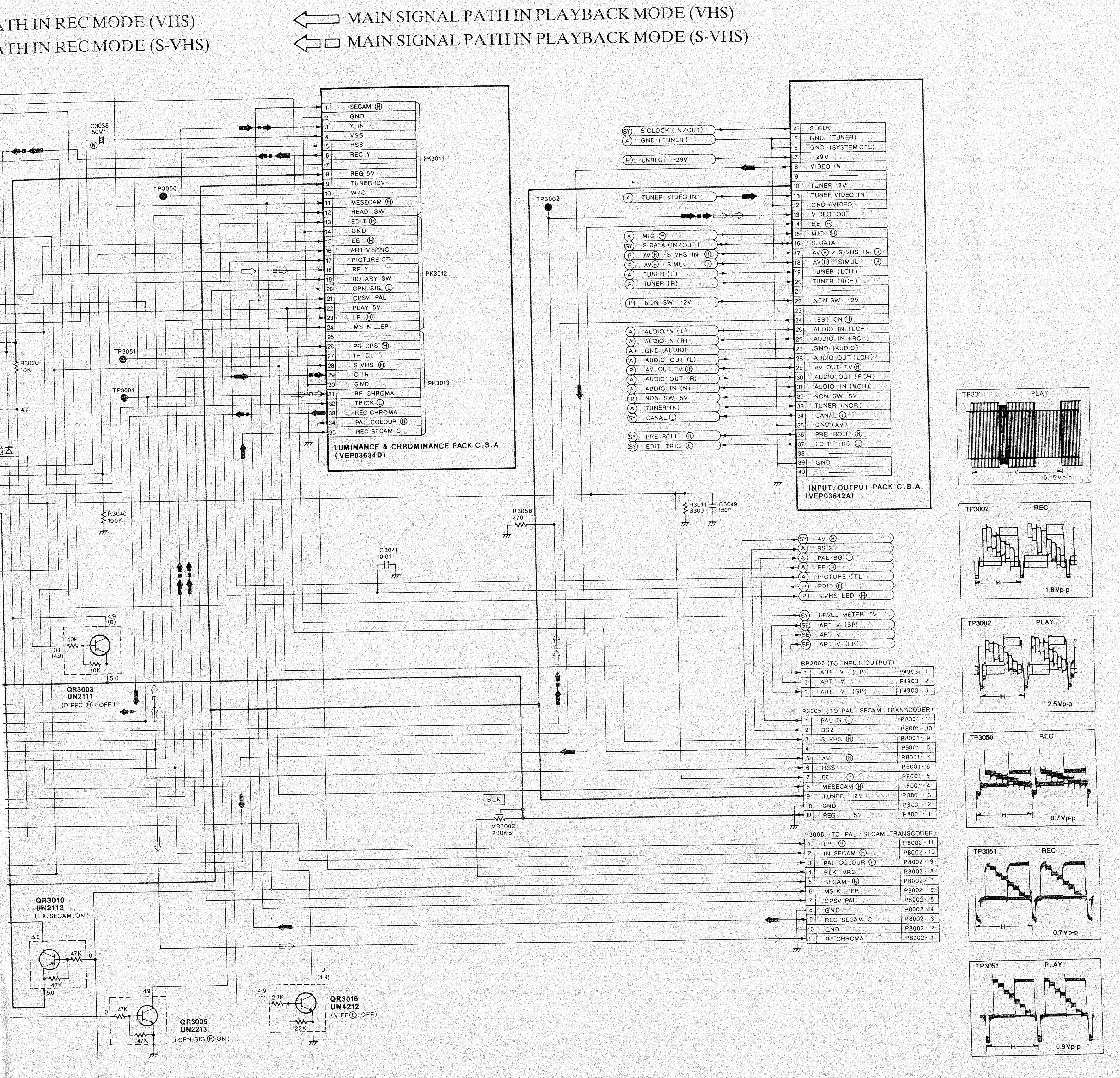
◀	MAIN SIGNAL PATH IN REC MODE (VHS)
◀■	MAIN SIGNAL PATH IN REC MODE (S-VHS)
⇦	MAIN SIGNAL PATH IN PLAYBACK MODE (VHS)
⇦□	MAIN SIGNAL PATH IN PLAYBACK MODE (S-VHS)


HQ PACK C.B.A. (VEP03635C)
PK3021
PK3022
CONV. OUT
GND
VIDEO OUT
TEST ON Ⓗ
C OUT
Y OUT
TUNER 12V
REC Y OUT
S-VHS REC Y
REG 5V
VHS REC Y
RF CHROMA
AT ENV DET
RF Y IN
S-VHS SW Ⓗ
S-VHS TAPE Ⓛ
RF Y OUT
PB CPS Ⓗ
EX. SECAM Ⓗ
PIX SOFT Ⓗ
SY ......TO SYSTEM CONTROL
P ......TO POWER SUPPLY
SE ......TO SERVO
A ......TO AUDIO
P3001 (TO HEAD AMP)
P3002 (TO PAL / SECAM TRANSCODER)
P3003 (TO LUMINANCE & CHROMINANCE SEPARATION)
P3007 (TO SUB LUMINANCE & CHROMINANCE)
P3008 (TO SUB LUMINANCE & CHROMINANCE)
Q3009 2SB709 (PLAY:ON)
Q3001 2SD602 (PLAY:ON)
QR3001 UN2213 (PLAY Ⓛ:ON)
QR3004 UN2111 (V.EE Ⓛ:ON)
QR3008 UN2111 (S-VHS:ON)
QR3009 UN2213 (S-VHS Ⓗ:ON)
Q3007 2SD601 (AMP)
Q3006 2SD601 (BUFFER)
QR3006 UN2212 (MIX)
Q3008 2SC2295 (AMP)
QR3002 UN2213 (PLAY:ON)
QR3007 UN2214 (BUFFER)
QR3012 DTC363EK (EXCEPT D.REC:ON)
QR3014 UN2211 (VHS:ON)
QR3013 UN211D (VHS:ON)
QR3003 UN2111 (D.REC Ⓗ:OFF)
Q3002 2SD1306 (EX. SECAM Ⓗ:ON)
QR3010 UN2113 (EX.SECAM:ON)
QR3005 UN2213 (CPN SIG Ⓗ:ON)
QR3016 UN4212 (V.EE Ⓛ:OFF)
IC3001 M52055FP
VHS REC Y
TP3050
TP3051
TP3001
TP3002
VR3001 2KB
VR3002 200KB
BLK
LUMINANCE & CHROMINANCE PACK C.B.A (VEP03634D)
PK3011
PK3012
PK3013
SECAM Ⓗ
Y IN
VSS
HSS
REC Y
REG 5V
TUNER 12V
W/C
MESECAM Ⓗ
HEAD SW
EDIT Ⓗ
EE Ⓗ
ART V SYNC
PICTURE CTL
RF Y
ROTARY SW
CPN SIG Ⓛ
CPSV PAL
PLAY 5V
LP Ⓗ
MS KILLER
PB CPS Ⓗ
IH DL
S-VHS Ⓗ
C IN
RF CHROMA
TRICK Ⓛ
REC CHROMA
PAL COLOUR Ⓗ
REC SECAM C
INPUT/OUTPUT (VEP03642A)
S.CLK
GND (TUNER)
UNREG -29V
TUNER VIDEO IN
VIDEO OUT
MIC Ⓗ
S.DATA
TUNER (LCH)
TUNER (RCH)
NON SW 12V
TEST ON Ⓗ
AUDIO IN (L)
AUDIO IN (R)
AUDIO OUT (L)
AUDIO OUT (R)
AV OUT TV Ⓗ
PRE ROLL Ⓗ
EDIT TRIG Ⓛ
BP2003 (TO INPUT/O
P3005 (TO PAL/SEC
P3006 (TO PAL/SE
1
2
3
4
5
6
7
8
9
10
11
12
G
F
E
D
C
B
A

NOTE: WHEN SECAM SIGNAL IS RECORDED WITH S-VHS MODE OR LP MODE, SECAM SIGNAL IS AUTOMATICALLY CONVERTED TO PAL SIGNAL AND IT IS RECORDED.

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS (　　) ON THIS DIAGRAM IS RECORD MODE WITH SECAM COLOUR SIGNAL. (S-VHS: SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH SECAM COLOUR SIGNAL. (S-VHS: SP MODE)

NOTE


ATH IN REC MODE (VHS)
ATH IN REC MODE (S-VHS)
MAIN SIGNAL PATH IN PLAYBACK MODE (VHS)
MAIN SIGNAL PATH IN PLAYBACK MODE (S-VHS)
SECAM Ⓗ
GND
Y IN
VSS
HSS
REC Y
REG 5V
TUNER 12V
W/C
MESECAM Ⓗ
HEAD SW
EDIT Ⓗ
GND
EE Ⓗ
ART V SYNC
PICTURE CTL
RF Y
ROTARY SW
CPN SIG Ⓛ
CPSV PAL
PLAY 5V
LP Ⓗ
MS KILLER
PB CPS Ⓗ
1H DL
S-VHS Ⓗ
C IN
GND
RF CHROMA
TRICK Ⓛ
REC CHROMA
PAL COLOUR Ⓗ
REC SECAM C
PK3011
PK3012
PK3013
LUMINANCE & CHROMINANCE PACK C.B.A (VEP03634D)
S.CLK
GND (TUNER)
GND (SYSTEM CTL)
-29V
VIDEO IN
TUNER 12V
TUNER VIDEO IN
GND (VIDEO)
VIDEO OUT
EE Ⓗ
MIC Ⓗ
S.DATA
AVⒽ / S-VHS IN Ⓗ
AVⒽ / SIMUL Ⓗ
TUNER (LCH)
TUNER (RCH)
NON SW 12V
TEST ON Ⓗ
AUDIO IN (LCH)
AUDIO IN (RCH)
GND (AUDIO)
AUDIO OUT (LCH)
AV OUT TV Ⓗ
AUDIO OUT (RCH)
AUDIO IN (NOR)
NON SW 5V
TUNER (NOR)
CANAL Ⓛ
GND (AV)
PRE ROLL Ⓗ
EDIT TRIG Ⓛ
GND
INPUT/OUTPUT PACK C.B.A. (VEP03642A)
TP3050
TP3002
TP3051
TP3001
C3038 50V1
R3020 10K
R3040 100K
R3058 470
R3011 3300
C3049 150P
C3041 0.01
VR3002 200KB
BLK
QR3003 UN2111 (D.REC Ⓗ : OFF)
QR3010 UN2113 (EX.SECAM:ON)
QR3005 UN2213 (CPN SIG Ⓗ:ON)
QR3016 UN4212 (V.EEⓁ:OFF)
BP2003 (TO INPUT/OUTPUT)
ART V (LP)
ART V
ART V (SP)
P3005 (TO PAL/SECAM TRANSCODER)
PAL-G Ⓛ
BS2
S-VHS Ⓗ
AV
HSS
EE Ⓗ
MESECAM Ⓗ
TUNER 12V
GND
REG 5V
P3006 (TO PAL/SECAM TRANSCODER)
LP Ⓗ
IN SECAM Ⓗ
PAL COLOUR Ⓗ
BLK VR2
SECAM
MS KILLER
CPSV PAL
GND
REC SECAM C
GND
RF CHROMA
AV Ⓗ
BS 2
PAL-BG Ⓛ
EE Ⓗ
PICTURE CTL
EDIT Ⓗ
S-VHS LED Ⓗ
LEVEL METER 5V
ART V (SP)
ART V
ART V (LP)
TP3001 PLAY 0.15Vp-p
TP3002 REC 1.8Vp-p
TP3002 PLAY 2.5Vp-p
TP3050 REC 0.7Vp-p
TP3051 REC 0.7Vp-p
TP3051 PLAY 0.9Vp-p
7
8
9
10
11
12
13

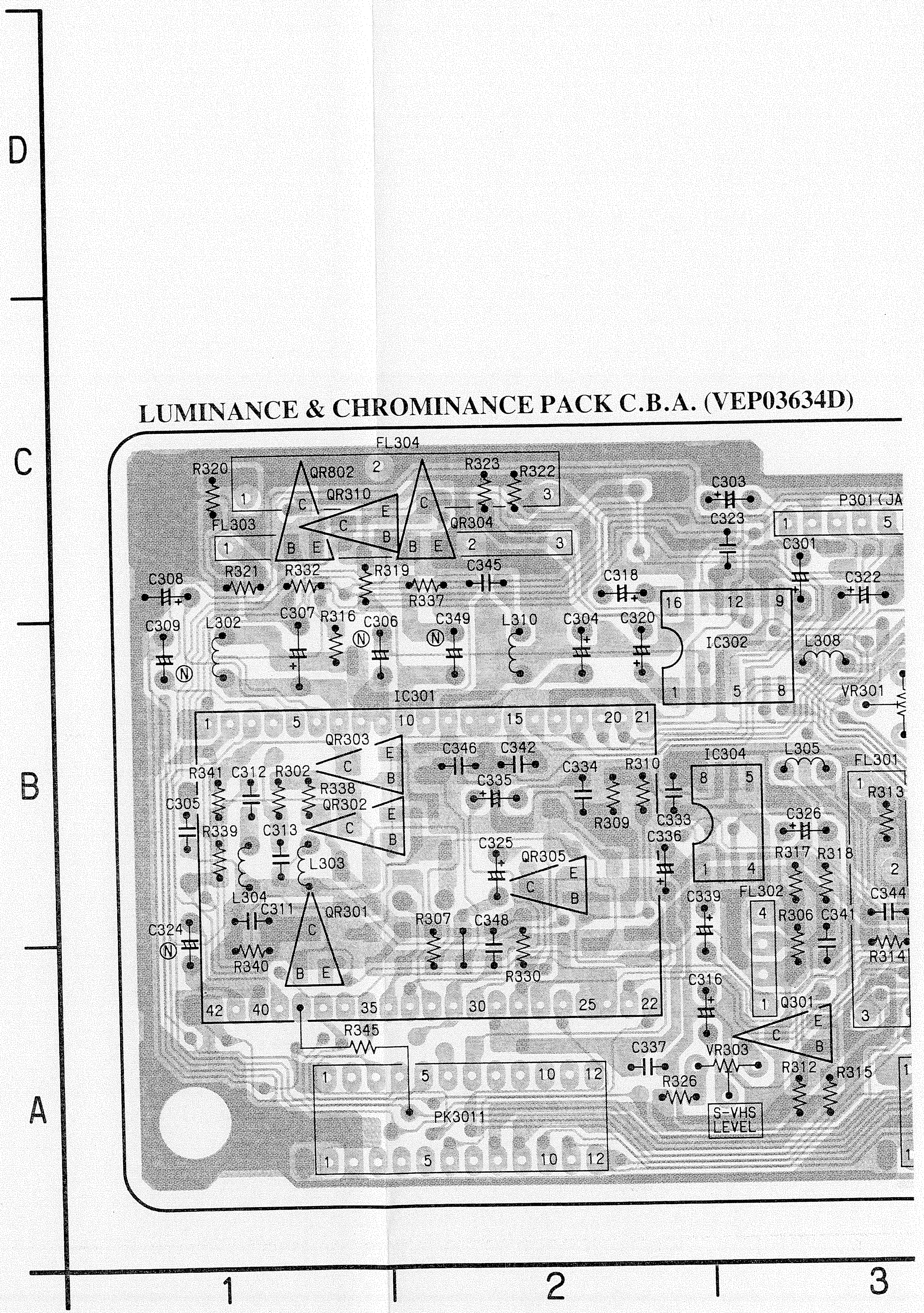
NOTE: WHEN SECAM SIGNAL IS RECORDED WITH S-VHS MODE OR LP MODE, SECAM SIGNAL IS AUTOMATICALLY CONVERTED TO PAL SIGNAL AND IT IS RECORDED.

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH SECAM COLOUR SIGNAL. (S-VHS: SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH SECAM COLOUR SIGNAL. (S-VHS: SP MODE)

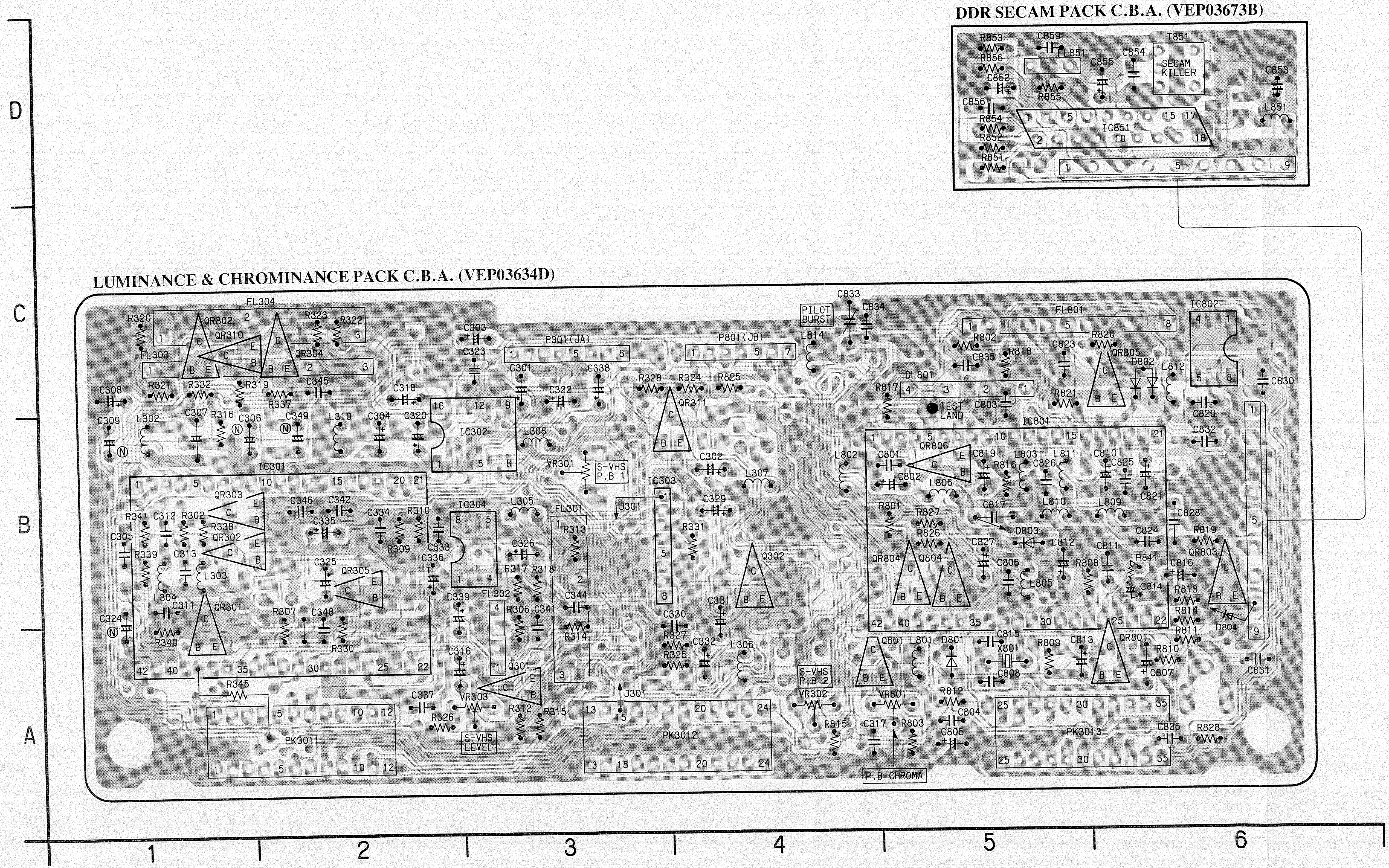
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

3-15. LUMINANCE & CHROMINANCE PACK C.B.A. (VEP03634I

LUMINANCE & CHROMINANCE PACK C.B.A. (VEP03634D)


D
C
B
A
1
2
3
FL304
R320
QR802
QR310
R323
R322
C303
C323
P301 (JA
FL303
QR304
C301
C308
R321
R332
R319
C345
C318
C322
C309
L302
C307
R316
C306
R337
C349
L310
C304
C320
IC302
L308
IC301
VR301
QR303
C346
C342
IC304
L305
FL301
R341
C312
R302
R338
QR302
C335
C334
R310
R313
C305
R339
C313
L303
C325
QR305
R309
C333
C336
C326
R317
R318
L304
C311
QR301
R307
C348
C339
FL302
R306
C341
C344
C324
R340
R330
C316
R314
Q301
R345
C337
VR303
R312
R315
R326
S-VHS LEVEL
PK3011

3-15. LUMINANCE & CHROMINANCE PACK C.B.A. (VEP03634D)


DDR SECAM PACK C.B.A. (VEP03673B)

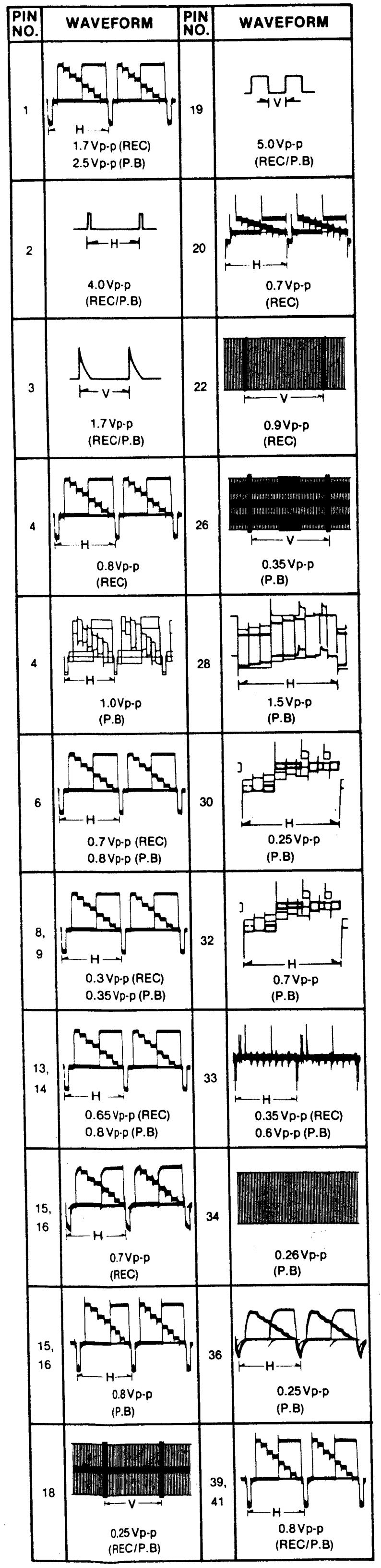
LUMINANCE & CHROMINANCE PACK C.B.A. (VEP03634D)

D
C
B
A
1
2
3
4
5
6
R853
C859
FL851
T851
R856
C855
C854
SECAM KILLER
C853
C852
R855
C856
R854
IC851
L851
R852
R851
FL304
QR802
QR310
QR304
R320
R323
R322
FL303
C303
C323
P301 (JA)
P801 (JB)
PILOT BURST
C833
C834
L814
FL801
IC802
R802
R820
C835
R818
C823
QR805
D802
L812
C830
DL801
R817
TEST LAND
C803
R821
IC801
C829
C832
C308
R321
R332
R319
C345
R337
C318
C301
C338
C322
R328
R324
R825
QR311
C309
L302
C307
R316
C306
C349
L310
C304
C320
IC302
L308
VR301
S-VHS P.B 1
C302
L307
L802
C801
QR806
C819
R816
L803
C826
L811
C810
C825
C802
L806
C821
IC301
IC303
C329
R801
C817
L810
L809
C828
QR303
C346
C342
IC304
L305
FL301
J301
R341
C312
R302
R338
C335
C334
R310
R313
R331
R827
D803
C824
R819
C305
QR302
R309
C333
C326
R826
C812
C811
QR803
R339
C313
L303
C336
R317
R318
Q302
QR804
Q804
C827
C806
R808
R841
C816
C325
QR305
C339
FL302
C344
L805
C814
R813
L304
C311
QR301
R307
C348
R306
C341
R314
C330
C331
R814
C324
R340
R330
R327
C332
L306
C815
R811
D804
R325
C316
Q301
Q801
L801
D801
X801
R809
C813
QR801
R810
C808
C807
C831
R345
C337
VR303
R312
R315
J301
S-VHS P.B 2
VR302
VR801
R812
C804
R326
R815
C317
R803
C805
S-VHS LEVEL
PK3011
PK3012
PK3013
C836
R828
P.B CHROMA

LUMINANCE & CHROMINANCE PACK C.B.A.	
Transistor	
Q301	A-3
Q302	B-4
Q801	A-5
Q804	B-5
Transistor & Resistor	
QR301	B-1
QR302	B-1
QR303	B-1
QR304	C-2
QR305	B-2
QR310	C-1
QR311	C-4
QR801	A-6
QR802	C-1
QR803	B-6
QR804	B-5
QR805	C-6
QR806	B-5
Integrated Circuit	
IC301	B-2
IC302	B-3
IC303	B-3
IC304	B-3
IC801	B-5
IC802	C-6
IC851	D-6
Adjustment	
C833	C-4
T851	D-6
VR301	B-3
VR302	A-4
VR303	A-3
VR801	A-5
Connector	
P301	C-3
P801	C-4
PK3011	A-2
PK3012	A-4
PK3013	A-5

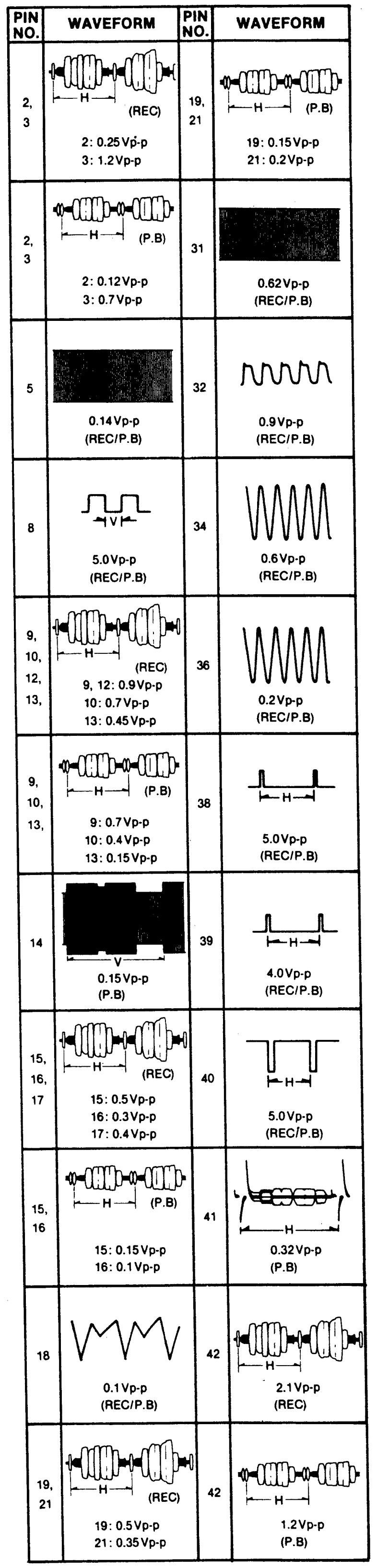
ADDRESS INFORMATION

IC301 (VEFH07C)
(S-VHS: SP: SECAM MODE)



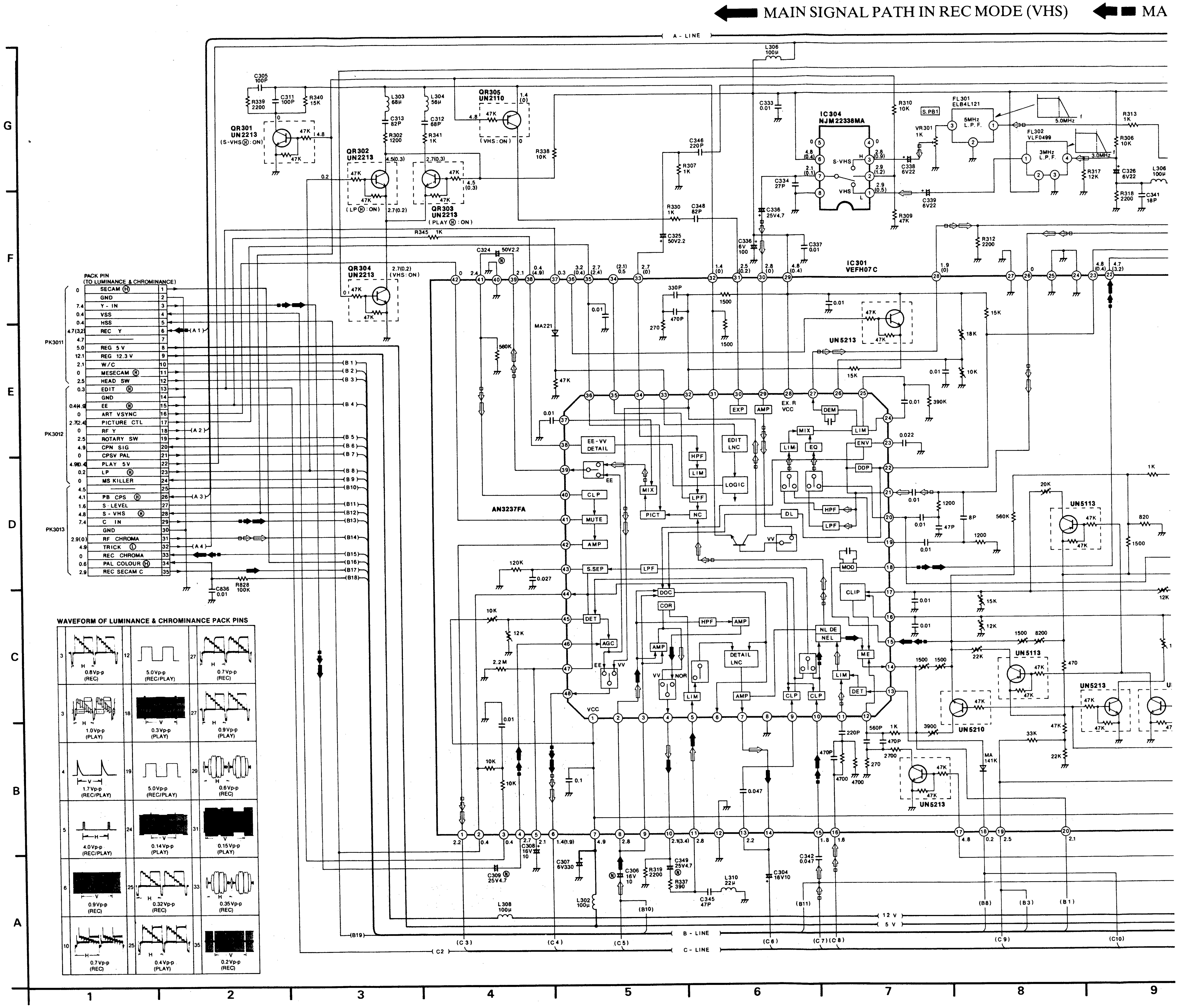
PIN NO.	WAVEFORM	PIN NO.	WAVEFORM
1	1.7 Vp-p (REC) 2.5 Vp-p (P.B)	19	5.0 Vp-p (REC/P.B)
2	4.0 Vp-p (REC/P.B)	20	0.7 Vp-p (REC)
3	1.7 Vp-p (REC/P.B)	22	0.9 Vp-p (REC)
4	0.8 Vp-p (REC)	26	0.35 Vp-p (P.B)
4	1.0 Vp-p (P.B)	28	1.5 Vp-p (P.B)
6	0.7 Vp-p (REC) 0.8 Vp-p (P.B)	30	0.25 Vp-p (P.B)
8, 9	0.3 Vp-p (REC) 0.35 Vp-p (P.B)	32	0.7 Vp-p (P.B)
13, 14	0.65 Vp-p (REC) 0.8 Vp-p (P.B)	33	0.35 Vp-p (REC) 0.6 Vp-p (P.B)
15, 16	0.7 Vp-p (REC)	34	0.26 Vp-p (P.B)
15, 16	0.8 Vp-p (P.B)	36	0.25 Vp-p (P.B)
18	0.25 Vp-p (REC/P.B)	39, 41	0.8 Vp-p (REC/P.B)

IC801 (VCR0284)
(S-VHS: SP: SECAM MODE)

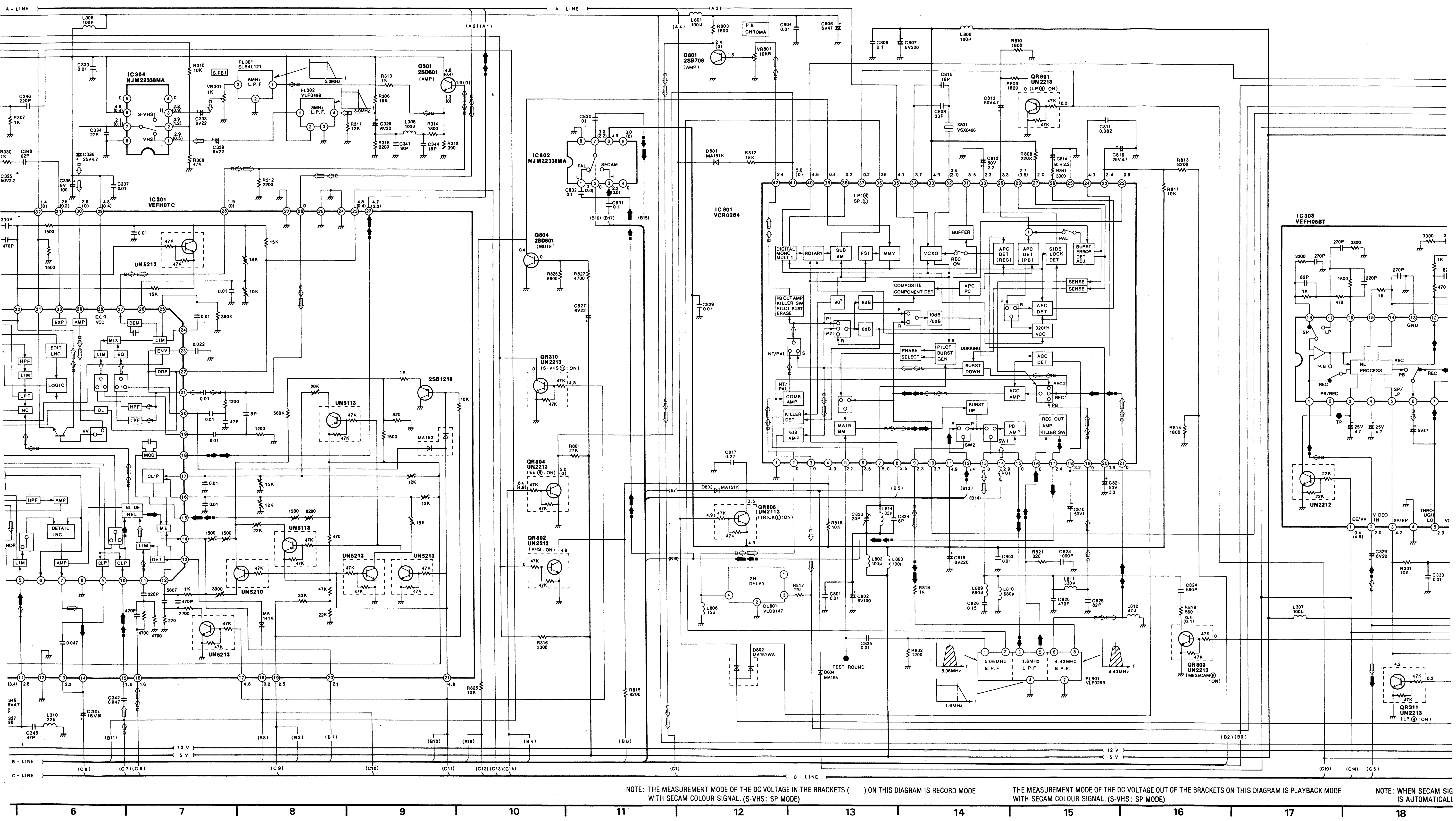


PIN NO.	WAVEFORM	PIN NO.	WAVEFORM
2, 3	(REC) 2: 0.25 Vp-p 3: 1.2 Vp-p	19, 21	(P.B) 19: 0.15 Vp-p 21: 0.2 Vp-p
2, 3	(P.B) 2: 0.12 Vp-p 3: 0.7 Vp-p	31	0.62 Vp-p (REC/P.B)
5	0.14 Vp-p (REC/P.B)	32	0.9 Vp-p (REC/P.B)
8	5.0 Vp-p (REC/P.B)	34	0.6 Vp-p (REC/P.B)
9, 10, 12, 13,	(REC) 9, 12: 0.9 Vp-p 10: 0.7 Vp-p 13: 0.45 Vp-p	36	0.2 Vp-p (REC/P.B)
9, 10, 13,	(P.B) 9: 0.7 Vp-p 10: 0.4 Vp-p 13: 0.15 Vp-p	38	5.0 Vp-p (REC/P.B)
14	0.15 Vp-p (P.B)	39	4.0 Vp-p (REC/P.B)
15, 16, 17	(REC) 15: 0.5 Vp-p 16: 0.3 Vp-p 17: 0.4 Vp-p	40	5.0 Vp-p (REC/P.B)
15, 16	(P.B) 15: 0.15 Vp-p 16: 0.1 Vp-p	41	0.32 Vp-p (P.B)
18	0.1 Vp-p (REC/P.B)	42	2.1 Vp-p (REC)
19, 21	(REC) 19: 0.5 Vp-p 21: 0.35 Vp-p	42	1.2 Vp-p (P.B)

3-16. LUMINANCE & CHROMINANCE PACK SCHEMATIC DIAGRAM


MAIN SIGNAL PATH IN REC MODE (VHS)
MA
A - LINE
B - LINE
C - LINE
12 V
5 V
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
PACK PIN
(TO LUMINANCE & CHROMINANCE)
PK3011
PK3012
PK3013
0 SECAM Ⓗ 1
GND 2
7.4 Y - IN 3
0.4 VSS 4
0.4 HSS 5
4.7(3.2) REC Y 6
4.7 7
5.0 REG 5 V 8
12.1 REG 12.3 V 9
2.1 W/C 10
0 MESECAM Ⓗ 11
2.5 HEAD SW 12
0.3 EDIT Ⓗ 13
GND 14
0.4(4.9) EE Ⓗ 15
0 ART VSYNC 16
2.7(2.4) PICTURE CTL 17
0 RF Y 18
2.5 ROTARY SW 19
4.9 CPN SIG 20
0 CPSV PAL 21
4.9(0.4) PLAY 5V 22
0.2 LP Ⓗ 23
0 MS KILLER 24
4.5 25
4.1 PB CPS Ⓗ 26
1.6 S · LEVEL 27
4.8 S - VHS Ⓗ 28
7.4 C IN 29
GND 30
2.9(0) RF CHROMA 31
4.9 TRICK Ⓛ 32
0 REC CHROMA 33
0.6 PAL COLOUR Ⓗ 34
2.9 REC SECAM C 35
(A 1)
(A 2)
(A 3)
(A 4)
C836 0.01
R828 100K
WAVEFORM OF LUMINANCE & CHROMINANCE PACK PINS
3 0.8Vp-p (REC)
12 5.0Vp-p (REC/PLAY)
27 0.7Vp-p (REC)
3 1.0Vp-p (PLAY)
18 0.3Vp-p (PLAY)
27 0.9Vp-p (PLAY)
4 1.7Vp-p (REC/PLAY)
19 5.0Vp-p (REC/PLAY)
29 0.6Vp-p (REC)
5 4.0Vp-p (REC/PLAY)
24 0.14Vp-p (PLAY)
31 0.15Vp-p (PLAY)
6 0.9Vp-p (REC)
25 0.32Vp-p (REC)
33 0.35Vp-p (REC)
10 0.7Vp-p (REC)
25 0.4Vp-p (PLAY)
35 0.2Vp-p (REC)
QR301 UN2213 (S-VHS Ⓗ : ON)
QR302 UN2213 (LP Ⓗ : ON)
QR303 UN2213 (PLAY Ⓗ : ON)
QR304 UN2213 (VHS : ON)
QR305 UN2110 (VHS : ON)
IC304 NJM2233BMA
S-VHS
VHS
IC301 VEFH07C
AN3237FA
FL301 ELB4L121
FL302 VLF0499
5MHz L.P.F.
3MHz L.P.F.
5.0MHz
3.0MHz
S.PB1
UN5213
UN5113
UN5210
MA221
MA141K
EE-VV DETAIL
CLP
MUTE
AMP
S.SEP
DET
AGC
DOC
COR
HPF
LIM
LPF
MIX
PICT
NC
EDIT LNC
LOGIC
EXP
EX. R VCC
DEM
ENV
DDP
EQ
DL
MOD
CLIP
NL DE NEL
ME
DETAIL LNC
VCC
L306 100µ
L303 68µ
L304 56µ
L308 100µ
L302 100µ
L310 22µ
C305 100P
C311 100P
R339 2200
R340 15K
C313 82P
C312 68P
R302 1200
R341 1K
R338 10K
R307 1K
C346 220P
R330 1K
C348 82P
C325 50V2.2
C324 50V2.2
R345 1K
C333 0.01
R310 10K
VR301 1K
C334 27P
C336 25V4.7
C338 6V22
C339 6V22
R309 47K
C337 0.01
R312 2200
R313 1K
R306 10K
R317 12K
C326 6V22
R318 2200
C341 18P
C307 6V330
C309 25V4.7
C306 16V 10
R319 2200
C349 25V4.7
R337 390
C345 47P
C304 16V10
C342 0.047
C308 16V 10
(B 1)
(B 2)
(B 3)
(B 4)
(B 5)
(B 6)
(B 7)
(B 8)
(B 9)
(B10)
(B11)
(B12)
(B13)
(B14)
(B15)
(B16)
(B17)
(B18)
(B19)
(C 2)
(C 3)
(C 4)
(C 5)
(C 6)
(C 7)
(C 8)
(C 9)
(C10)

MAIN SIGNAL PATH IN REC MODE (VHS) MAIN SIGNAL PATH IN REC MODE (S-VHS) MAIN SIGNAL PATH IN PLAYBACK MODE (VHS) MAIN SIGNAL PATH IN PLAYBACK MODE (S-VHS)

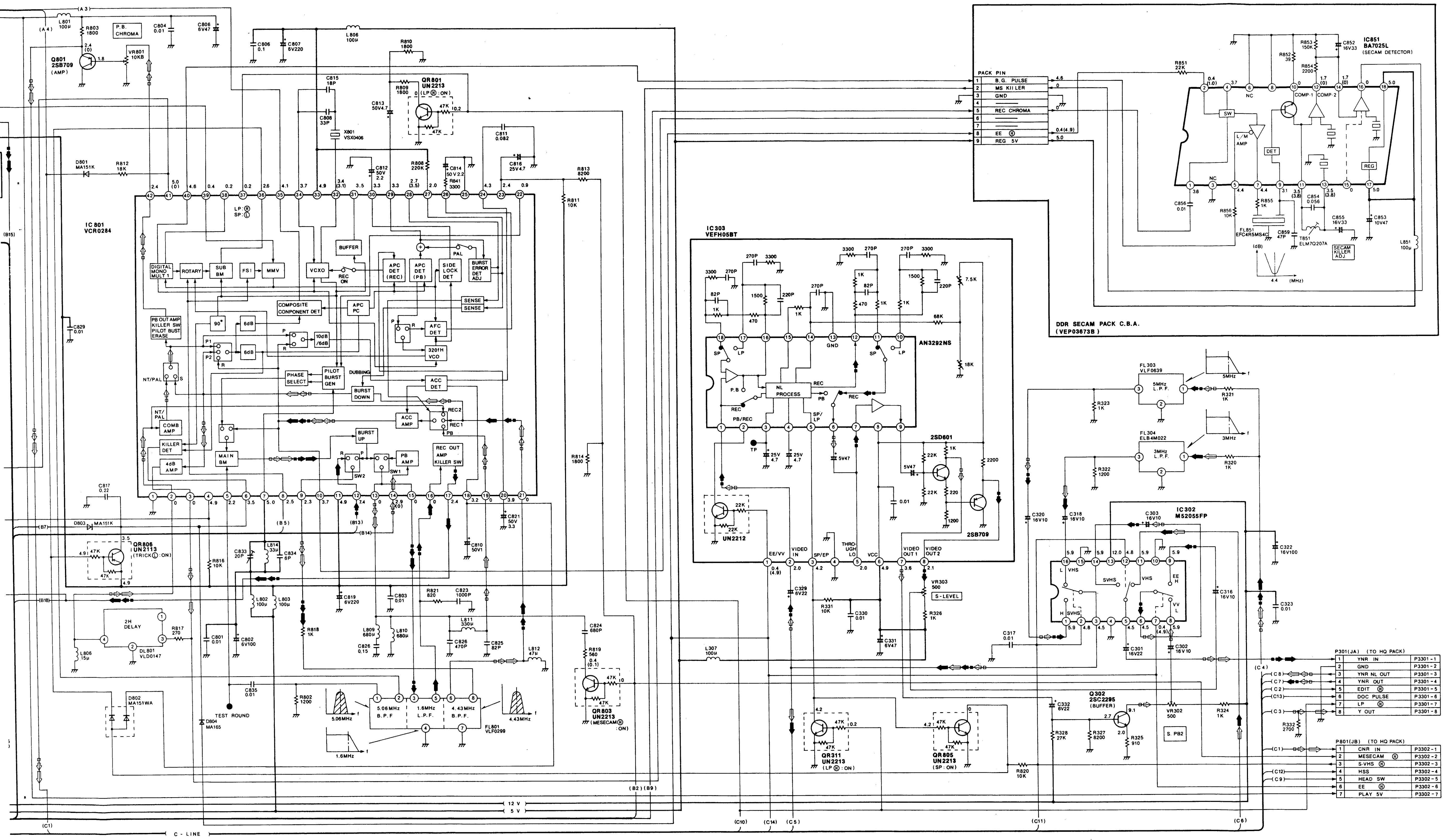

A - LINE
B - LINE
C - LINE
12 V
5 V
IC304 NJM22338MA
S-VHS
VHS
FL301 ELB4L121
5MHz L.P.F.
FL302 VLF0499
3MHz L.P.F.
Q301 2SD601 (AMP)
S.PB1
IC301 VEFH07C
UN5213
UN5113
UN5210
2SB1218
MA153
EXP
AMP
EX. R VCC
DEM
MIX
LIM
EQ
ENV
DOP
EDIT LNC
LOGIC
HPF
LPF
NC
DL
VV
MOD
CLIP
NL DE
NEL
ME
DETAIL LNC
DET
CLP
NOR
IC802 NJM22338MA
PAL
SECAM
Q804 2SD601 (MUTE)
QR310 UN2213 (S-VHS Ⓗ : ON)
QR804 UN2213 (EE Ⓡ : ON)
QR802 UN2213 (VHS : ON)
Q801 2SB709 (AMP)
P.B. CHROMA
VR801 10KB
IC801 VCR0284
LP Ⓡ SP Ⓛ
QR801 UN2213 (LP Ⓢ : ON)
X801 VSX0406
DIGITAL MONO MULTI
ROTARY
SUB BM
FSI
MMV
VCXO
REC ON
BUFFER
APC DET (REC)
APC DET (PB)
SIDE LOCK DET
BURST ERROR DET ADJ
SENSE
COMPOSITE COMPONENT DET
APC PC
AFC DET
320fH VCO
PB OUT AMP KILLER SW PILOT BURST ERASE
90°
6dB
10dB /6dB
NT/PAL
PHASE SELECT
PILOT BURST GEN
DUBBING
BURST DOWN
ACC DET
ACC AMP
REC2
REC1
COMB AMP
KILLER DET
4dB AMP
MAIN BM
BURST UP
SW2
SW1
PB AMP
REC OUT AMP KILLER SW
QR806 UN2113 (TRICK Ⓛ : ON)
D803 MA151K
D801 MA151K
2H DELAY
DL801 VLD0147
D802 MA151WA
D804 MA165
TEST ROUND
5.06MHz B.P.F
1.6MHz L.P.F.
4.43MHz B.P.F.
FL801 VLF0299
QR803 UN2213 (MESECAM Ⓡ : ON)
IC303 VEFH05BT
SP
LP
P.B
REC
NL PROCESS
PB/REC
SP/LP
GND
TP
UN2212
EE/VV
VIDEO IN
SP/EP
THROUGH LO
QR311 UN2213 (LP Ⓡ : ON)
6
7
8
9
10
11
12
13
14
15
16
17
18

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS (   ) ON THIS DIAGRAM IS RECORD MODE WITH SECAM COLOUR SIGNAL. (S-VHS: SP MODE)

THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH SECAM COLOUR SIGNAL. (S-VHS: SP MODE)

NOTE: WHEN SECAM SIG
IS AUTOMATICALL

HS) ⇦ MAIN SIGNAL PATH IN PLAYBACK MODE (VHS) ⇦□ MAIN SIGNAL PATH IN PLAYBACK MODE (S-VHS)


IC801
VCR0284
Q801
2SB709
(AMP)
VR801
10KB
P.B.
CHROMA
QR801
UN2213
(LP Ⓡ : ON)
X801
VSX0406
DIGITAL MONO MULT 1
ROTARY
SUB BM
FS1
MMV
VCXO
BUFFER
APC DET (REC)
APC DET (PB)
SIDE LOCK DET
BURST ERROR DET ADJ
COMPOSITE COMPONENT DET
APC PC
SENSE
AFC DET
320fH VCO
PHASE SELECT
PILOT BURST GEN
BURST DOWN
ACC DET
ACC AMP
BURST UP
PB AMP
REC OUT AMP KILLER SW
MAIN BM
COMB AMP
KILLER DET
4dB AMP
PB OUT AMP KILLER SW PILOT BUST ERASE
NT/PAL
LP: Ⓡ
SP: Ⓛ
QR806
UN2113
(TRICK Ⓛ ON)
2H DELAY
DL801
VLD0147
D802
MA151WA
D804
MA165
TEST ROUND
5.06MHz B.P.F
1.6MHz L.P.F.
4.43MHz B.P.F.
FL801
VLF0299
QR803
UN2213
(MESECAM Ⓡ : ON)
IC303
VEFH05BT
AN3282NS
NL PROCESS
UN2212
2SD601
2SB709
VR303
S-LEVEL
QR311
UN2213
(LP Ⓡ : ON)
QR805
UN2213
(SP : ON)
Q302
2SC2295
(BUFFER)
S. PB2
IC302
M52055FP
FL303
VLF0639
5MHz L.P.F.
FL304
ELB4M022
3MHz L.P.F.
PACK PIN
1 B.G. PULSE
2 MS KILLER
3 GND
5 REC CHROMA
8 EE Ⓡ
9 REG 5V
IC851
BA7025L
(SECAM DETECTOR)
FL851
EFC4R5MS4C
T851
ELM7Q207A
SECAM KILLER ADJ
DDR SECAM PACK C.B.A.
(VEP03673B)
P301(JA) (TO HQ PACK)
1 YNR IN P3301-1
2 GND P3301-2
3 YNR NL OUT P3301-3
4 YNR OUT P3301-4
5 EDIT Ⓡ P3301-5
6 DOC PULSE P3301-6
7 LP Ⓡ P3301-7
8 Y OUT P3301-8
P801(JB) (TO HQ PACK)
1 CNR IN P3302-1
2 MESECAM Ⓡ P3302-2
3 S-VHS Ⓡ P3302-3
4 HSS P3302-4
5 HEAD SW P3302-5
6 EE Ⓡ P3302-6
7 PLAY 5V P3302-7
12 V
5 V
C - LINE

E: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH SECAM COLOUR SIGNAL. (S-VHS : SP MODE)

THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH SECAM COLOUR SIGNAL. (S-VHS : SP MODE)

NOTE: WHEN SECAM SIGNAL IS RECORDED WITH S-VHS MODE OR LP MODE, SECAM SIGNAL IS AUTOMATICALLY CONVERTED TO PAL SIGNAL AND IT IS RECORDED.

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

12 13 14 15 16 17 18 19 20 21 22 23

Next Page:
HQ PACK Section

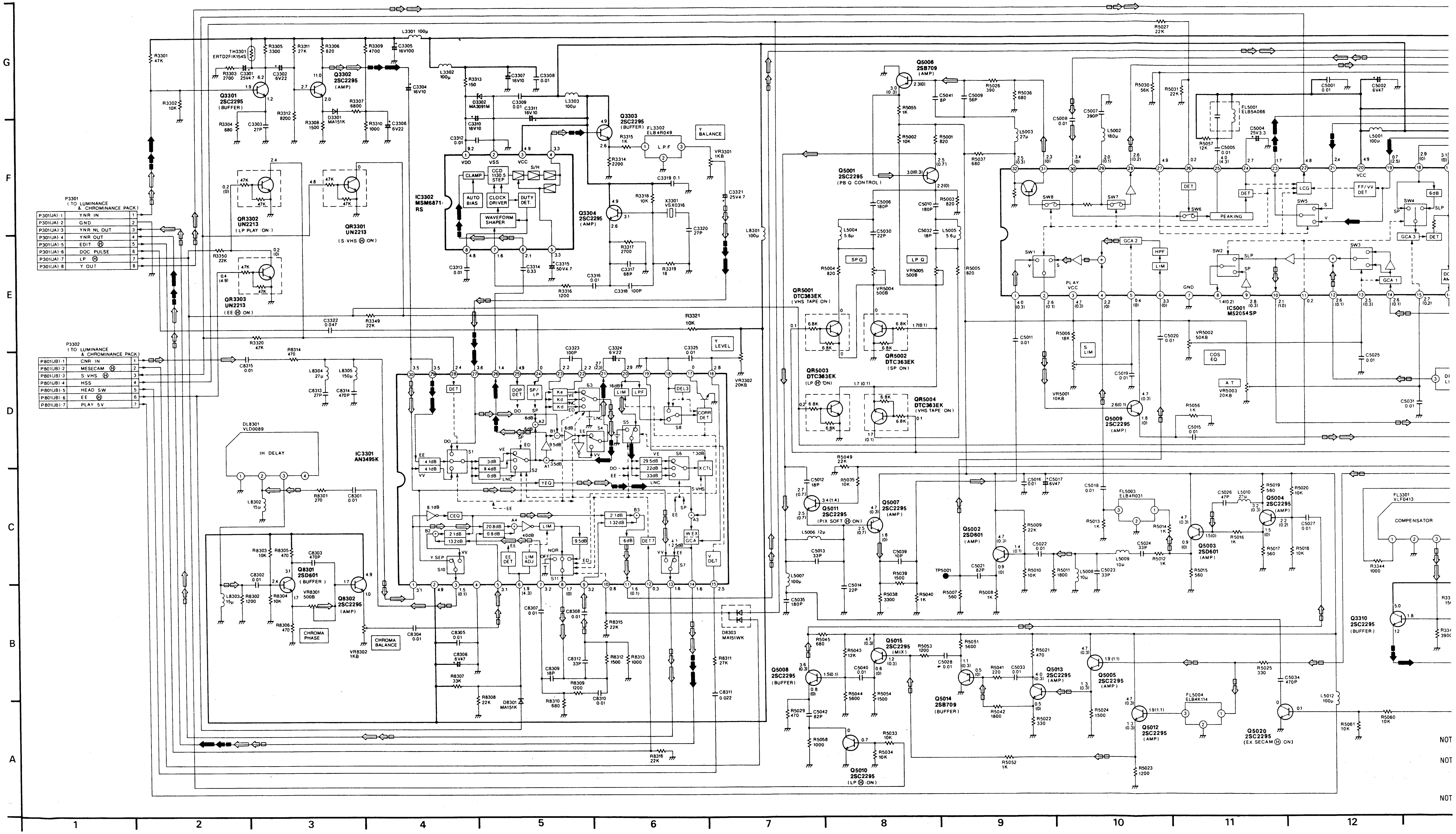
3-17. HQ PACK SCHEMATIC DIAGRAM

MAIN SIGNAL PATH IN REC MODE (VHS)

MAIN SIGNAL PATH IN REC MODE (S-VHS)

MAIN SIGNAL PATH IN PLAYBACK MODE (VHS)

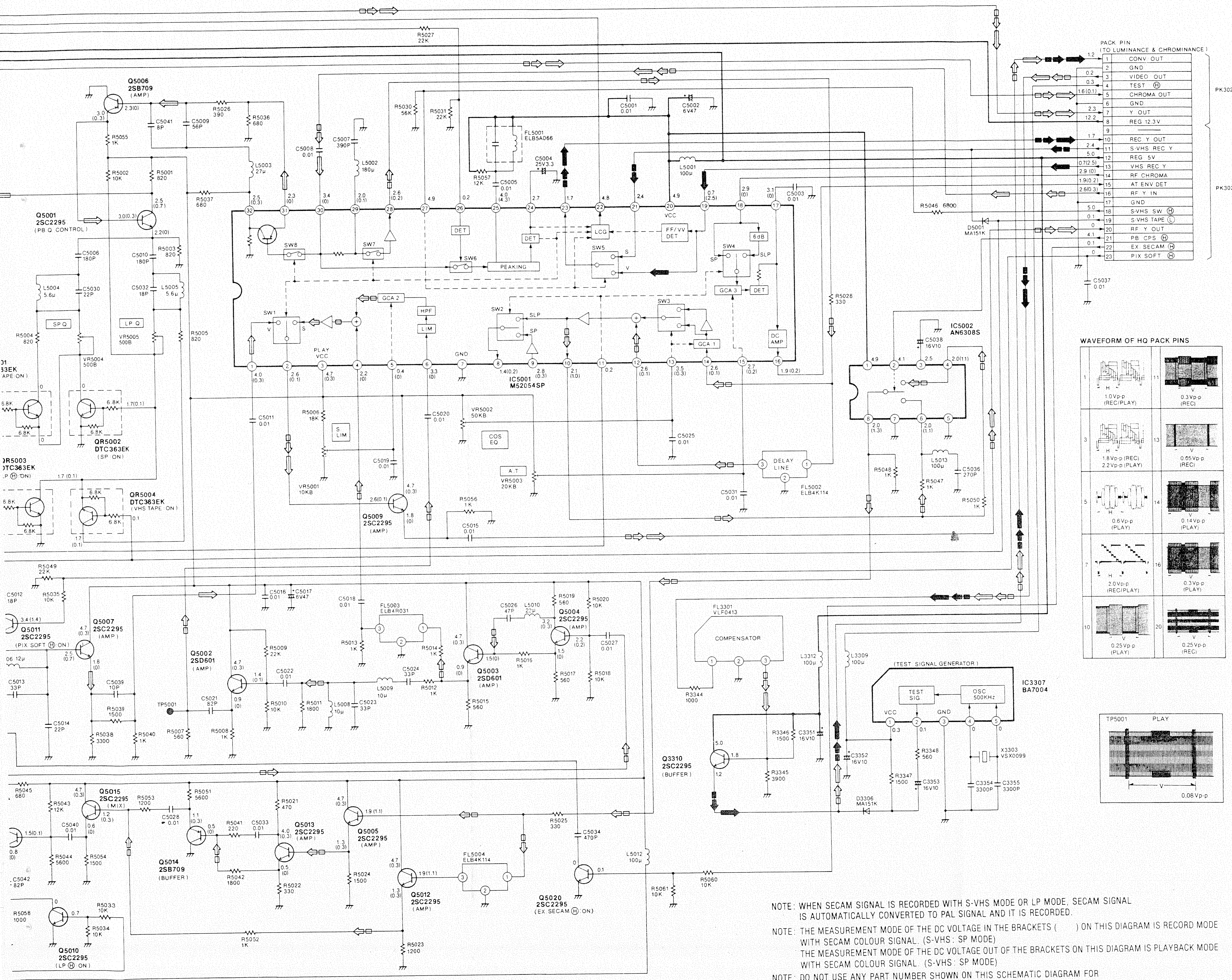
MAIN SIGNAL PATH IN PLAYBACK MODE (S-VHS)


G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12
P3301 (TO LUMINANCE & CHROMINANCE PACK)
P301(JA)-1 YNR IN
P301(JA)-2 GND
P301(JA)-3 YNR NL OUT
P301(JA)-4 YNR OUT
P301(JA)-5 EDIT Ⓗ
P301(JA)-6 DOC PULSE
P301(JA)-7 LP Ⓗ
P301(JA)-8 Y OUT
P3302 (TO LUMINANCE & CHROMINANCE PACK)
P801(JB)-1 CNR IN
P801(JB)-2 MESECAM Ⓗ
P801(JB)-3 S VHS Ⓗ
P801(JB)-4 HSS
P801(JB)-5 HEAD SW
P801(JB)-6 EE Ⓗ
P801(JB)-7 PLAY 5V
Q3301 2SC2295 (BUFFER)
Q3302 2SC2295 (AMP)
Q3303 2SC2295 (BUFFER)
Q3304 2SC2295 (AMP)
QR3302 UN2213 (LP PLAY ON)
QR3301 UN2213 (S-VHS Ⓗ ON)
QR3303 UN2213 (EE Ⓗ ON)
IC3302 MSM6871-RS
CLAMP
CCD 1130.5 STEP
S/H
AUTO BIAS
CLOCK DRIVER
DUTY DET.
WAVEFORM SHAPER
VDD
VSS
VCC
FL3302 ELB4R049
L.P.F
Y BALANCE
VR3301 1KB
X3301 VSX0316
TH3301 ERTD2FIK154S
Y LEVEL
VR3302 20KB
IC3301 AN3495K
DL8301 VLD0089
1H DELAY
Q8301 2SD601 (BUFFER)
Q8302 2SC2295 (AMP)
CHROMA PHASE
CHROMA BALANCE
VR8301 500B
VR8302 1KB
D8301 MA151K
D8303 MA151WK
DET
DOP DET
SP/LP
LIM
LPF
DEL3
CORR DET
S1
S2
S3
S4
S5
S6
S7
S8
S10
S11
LNC
YEQ
XCTL
CEQ
Y SEP
NOR
EE DET
LIM ADJ
DET7
WEX GCA
V DET
Q5001 2SC2295 (PB Q CONTROL)
Q5006 2SB709 (AMP)
QR5001 DTC363EK (VHS TAPE ON)
QR5002 DTC363EK (SP ON)
QR5003 DTC363EK (LP Ⓗ ON)
QR5004 DTC363EK (VHS TAPE ON)
SP Q
LP Q
VR5005 500B
VR5004 500B
Q5011 2SC2295 (PIX SOFT Ⓗ ON)
Q5007 2SC2295 (AMP)
Q5002 2SD601 (AMP)
Q5009 2SC2295 (AMP)
Q5003 2SD601 (AMP)
Q5004 2SC2295 (AMP)
FL5003 ELB4R031
Q5008 2SC2295 (BUFFER)
Q5015 2SC2295 (MIX)
Q5014 2SB709 (BUFFER)
Q5013 2SC2295 (AMP)
Q5005 2SC2295 (AMP)
Q5012 2SC2295 (AMP)
Q5010 2SC2295 (LP Ⓗ ON)
Q5020 2SC2295 (EX SECAM Ⓗ ON)
FL5004 ELB4K114
TP5001
IC5001 M52054SP
FL5001 ELB5A066
SW1
SW2
SW3
SW4
SW5
SW6
SW7
SW8
PEAKING
LCG
FF/VV DET
GCA 1
GCA 2
GCA 3
HPF
PLAY VCC
GND
VCC
COS EQ
A.T
VR5001 10KB
VR5002 50KB
VR5003 20KB
Q3310 2SC2295 (BUFFER)
FL3301 VLF0413
COMPENSATOR
NOT
NOT
NOT

3-18. HQ PACK C.B.A. (VEP03635C)

⇦ MAIN SIGNAL PATH IN PLAYBACK MODE (VHS)

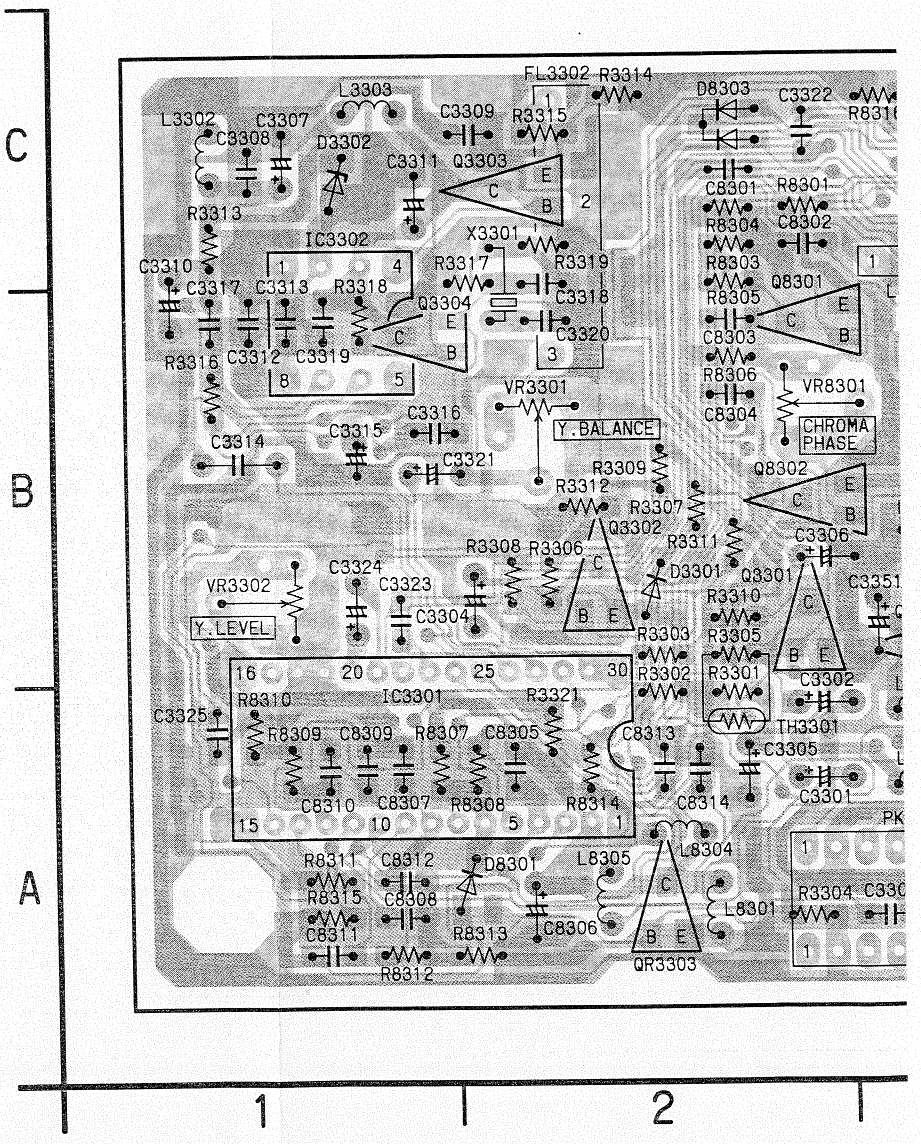
⇦▭ MAIN SIGNAL PATH IN PLAYBACK MODE (S-VHS)

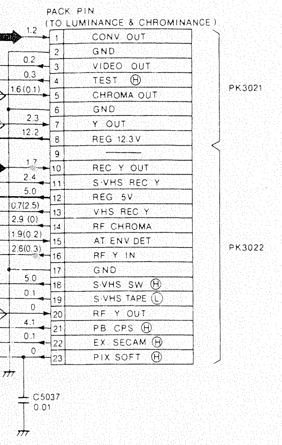

PACK PIN
(TO LUMINANCE & CHROMINANCE)
1 CONV OUT 1.2
2 GND
3 VIDEO OUT 0.2
4 TEST Ⓗ 0.3
5 CHROMA OUT 1.6(0.1)
6 GND
7 Y OUT 2.3
8 REG 12.3V 12.2
9 ——
10 REC Y OUT 1.7
11 S-VHS REC Y 2.4
12 REG 5V 5.0
13 VHS REC Y 0.7(2.5)
14 RF CHROMA 2.9(0)
15 AT ENV DET 1.9(0.2)
16 RF Y IN 2.6(0.3)
17 GND
18 S-VHS SW Ⓗ 5.0
19 S-VHS TAPE Ⓛ 0.1
20 RF Y OUT 0
21 PB CPS Ⓗ 4.1
22 EX SECAM Ⓗ 0.1
23 PIX SOFT Ⓗ 0
PK3021
PK3022
C5037 0.01
IC5001 M52054SP
IC5002 AN6308S
IC3307 BA7004
(TEST SIGNAL GENERATOR)
TEST SIG
OSC 500KHz
X3303 VSX0099
Q5006 2SB709 (AMP)
Q5001 2SC2295 (PB Q CONTROL)
QR5002 DTC363EK (SP ON)
QR5003 DTC363EK
QR5004 DTC363EK (VHS TAPE ON)
Q5009 2SC2295 (AMP)
Q5007 2SC2295 (AMP)
Q5011 2SC2295 (PIX SOFT Ⓗ ON)
Q5002 2SD601 (AMP)
Q5003 2SD601 (AMP)
Q5004 2SC2295 (AMP)
Q3310 2SC2295 (BUFFER)
Q5015 2SC2295 (MIX)
Q5014 2SB709 (BUFFER)
Q5013 2SC2295 (AMP)
Q5005 2SC2295 (AMP)
Q5012 2SC2295 (AMP)
Q5020 2SC2295 (EX SECAM Ⓗ ON)
Q5010 2SC2295 (LP Ⓗ ON)
FL5001 ELB5A066
FL5002 ELB4K114
FL5003 ELB4R031
FL5004 ELB4K114
FL3301 VLF0413
COMPENSATOR
D5001 MA151K
D3306 MA151K
SW1
SW2
SW3
SW4
SW5
SW6
SW7
SW8
PEAKING
DET
LCG
FF/VV DET
6dB
SLP
GCA 1
GCA 2
GCA 3
HPF
LIM
S LIM
COS EQ
AT
DC AMP
DELAY LINE
PLAY VCC
GND
VCC
SP Q
LP Q
TP5001
WAVEFORM OF HQ PACK PINS
1 1.0Vp-p (REC/PLAY)
11 0.3Vp-p (REC)
3 1.8Vp-p (REC) 2.2Vp-p (PLAY)
13 0.05Vp-p (REC)
5 0.6Vp-p (PLAY)
14 0.14Vp-p (PLAY)
7 2.0Vp-p (REC/PLAY)
16 0.3Vp-p (PLAY)
10 0.25Vp-p (PLAY)
20 0.25Vp-p (REC)
H
V
TP5001 PLAY
0.08Vp-p
8
9
10
11
12
13
14
15
16

NOTE: WHEN SECAM SIGNAL IS RECORDED WITH S-VHS MODE OR LP MODE, SECAM SIGNAL IS AUTOMATICALLY CONVERTED TO PAL SIGNAL AND IT IS RECORDED.

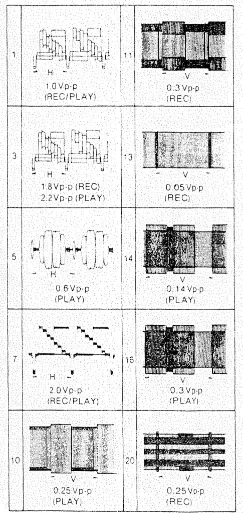
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS (   ) ON THIS DIAGRAM IS RECORD MODE WITH SECAM COLOUR SIGNAL. (S-VHS : SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH SECAM COLOUR SIGNAL. (S-VHS : SP MODE)

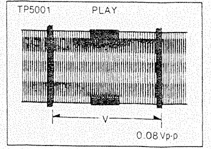
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.


C
B
A
1
2
FL3302
R3314
D8303
C3322
L3302
L3303
C3307
C3308
D3302
C3309
R3315
C3311
Q3303
R3313
IC3302
X3301
R3317
R3319
C3310
C3317
C3313
R3318
Q3304
C3318
C3320
R3316
C3312
C3319
VR3301
Y. BALANCE
C3314
C3315
C3316
C3321
R3312
R3309
R3307
Q3302
R3311
R3308
R3306
D3301
Q3301
C3306
C3324
C3323
VR3302
C3304
Y. LEVEL
R3310
R3303
R3305
R3302
R3301
C3302
IC3301
R3321
C3325
R8310
R8309
C8309
R8307
C8305
C8313
TH3301
C3305
C3301
C8310
C8307
R8308
R8314
C8314
R8311
C8312
D8301
L8305
L8304
R8315
C8308
L8301
C8311
R8313
C8306
R8312
QR3303
C8301
R8301
R8304
C8302
R8303
Q8301
R8305
C8303
R8306
VR8301
C8304
CHROMA PHASE
Q8302
C3351
R3304
PK


PACK PIN
(TO LUMINANCE & CHROMINANCE)
1 CONV OUT 1.2
2 GND
3 VIDEO OUT 0.2
4 TEST Ⓗ 0.3
5 CHROMA OUT 1.6(0.1)
6 GND
7 Y OUT 2.3
8 REG 12.3V 12.2
9 ———
10 REC Y OUT 1.7
11 S-VHS REC Y 2.4
12 REG 5V 5.0
13 VHS REC Y 0.7(2.5)
14 RF CHROMA 2.9 (0)
15 AT ENV DET 1.9(0.2)
16 RF Y IN 2.6(0.3)
17 GND
18 S-VHS SW Ⓗ 5.0
19 S-VHS TAPE Ⓛ 0.1
20 RF Y OUT 0
21 PB CPS Ⓗ 4.1
22 EX SECAM Ⓗ 0.1
23 PIX SOFT Ⓗ 0
PK3021
PK3022
C5037
0.01

WAVEFORM OF HQ PACK PINS





:AM SIGNAL

N THIS DIAGRAM IS RECORD MODE

THIS DIAGRAM IS PLAYBACK MODE

:OR

5 16

3-18. HQ PACK C.B.A. (VEP03635C)

HQ PACK C.B.A.

Transistor

Q3301	B-2
Q3302	B-2
Q3303	C-2
Q3304	B-1
Q3310	B-3
Q5001	A-6
Q5002	C-3
Q5003	C-4
Q5004	B-4
Q5005	C-6
Q5006	B-6
Q5007	B-6
Q5008	C-5
Q5009	A-5
Q5010	B-4
Q5011	A-6
Q5012	B-5
Q5013	C-5
Q5014	C-5
Q5015	C-5
Q5020	A-6
Q8301	B-2
Q8302	B-2

Transistor & Resistor

QR3301	B-3
QR3302	B-3
QR3303	A-2
QR5001	A-4
QR5002	A-4
QR5003	A-4
QR5004	A-4

Integrated Circuit

IC3301	A-1
IC3302	C-1
IC3307	A-3
IC5001	B-5
IC5002	C-6

Test Point

TP5001	B-4

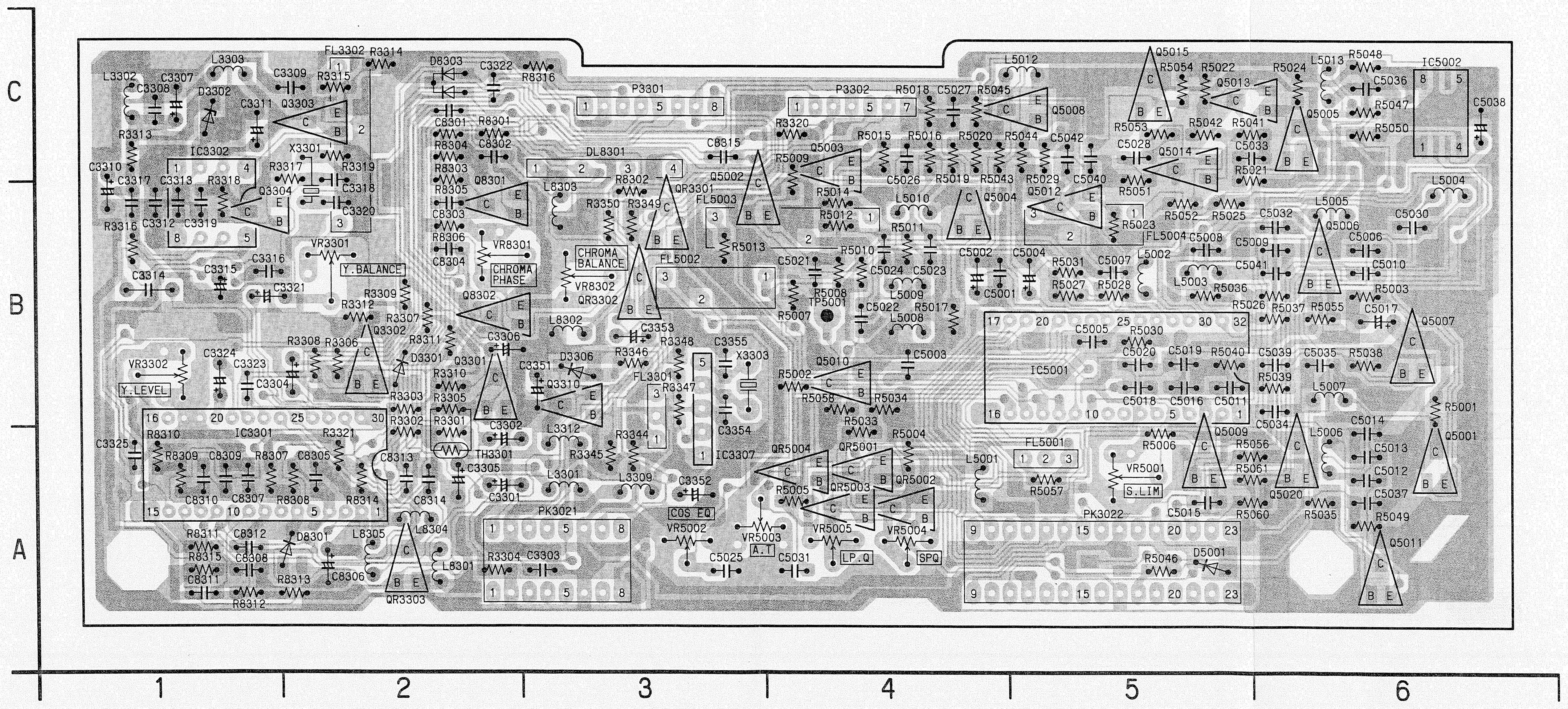
Adjustment

VR3301	B-2
VR3302	B-1
VR5001	A-5
VR5002	A-3
VR5003	A-3
VR5004	A-4
VR5005	A-4
VR8301	B-2
VR8302	B-3

Connector

P3301	C-3
P3302	C-4
PK3021	A-3
PK3022	A-5

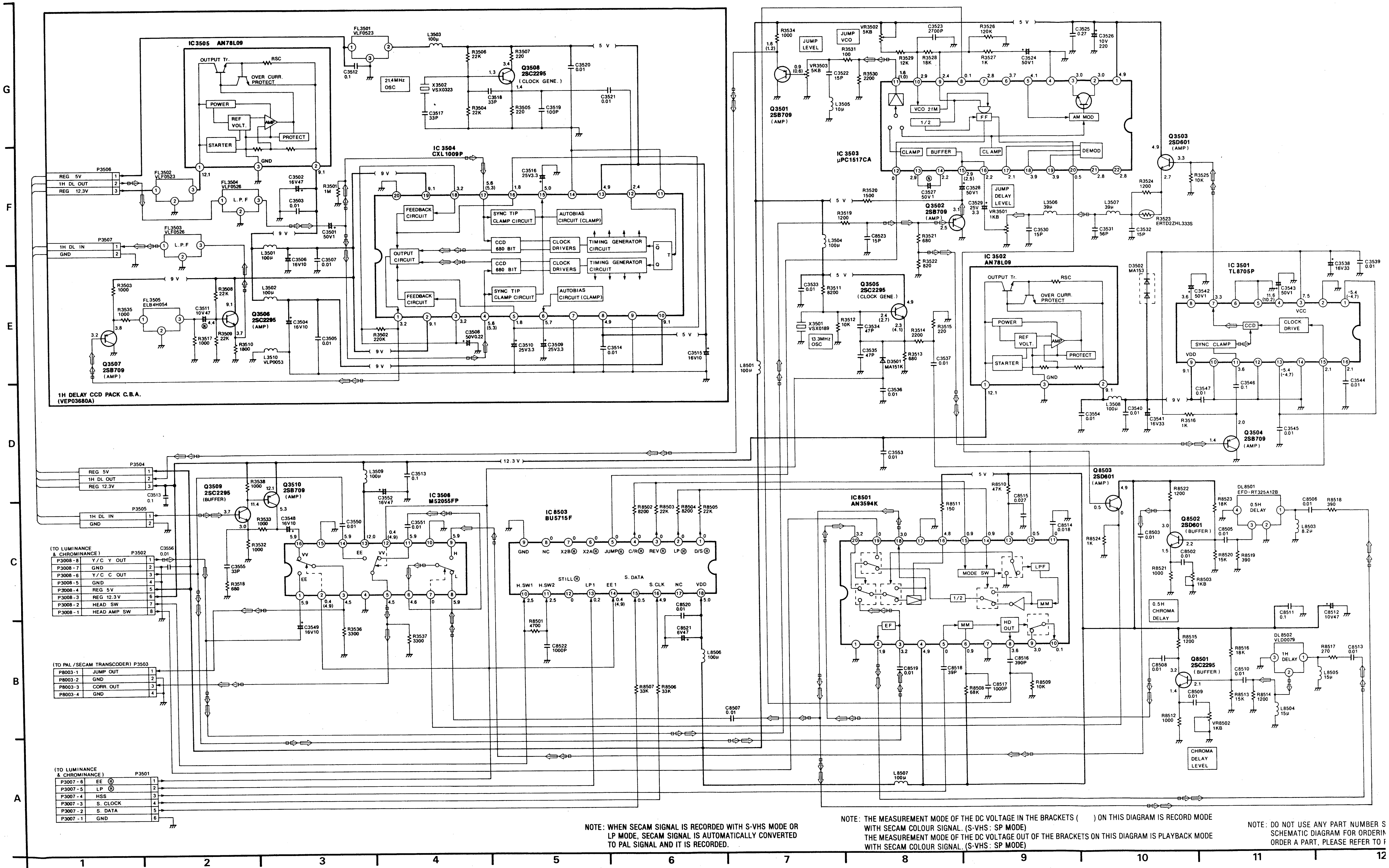
ADDRESS INFORMATION


C
B
A
1
2
3
4
5
6
Y.BALANCE
CHROMA BALANCE
CHROMA PHASE
Y.LEVEL
COS EQ
A.T
LP.Q
SPQ
S.LIM
IC3301
IC3302
IC3307
IC5001
IC5002
P3301
P3302
PK3021
PK3022
TP5001
VR3301
VR3302
VR5001
VR5002
VR5003
VR5004
VR5005
VR8301
VR8302
Q3301
Q3302
Q3303
Q3304
Q3310
Q5001
Q5002
Q5003
Q5004
Q5005
Q5006
Q5007
Q5008
Q5009
Q5010
Q5011
Q5012
Q5013
Q5014
Q5015
Q5020
Q8301
Q8302
QR3301
QR3302
QR3303
QR5001
QR5002
QR5003
QR5004
FL3301
FL3302
FL5001
FL5002
FL5003
FL5004
DL8301
X3301
X3303
TH3301
D3301
D3302
D3306
D5001
D8301
D8303
L3301
L3302
L3303
L3304
L3309
L3312
L5001
L5002
L5003
L5004
L5005
L5006
L5007
L5008
L5009
L5010
L5012
L5013
L8301
L8302
L8303
L8304
L8305

3-19. SUB LUMINANCE & CHROMINANCE SCHEMATIC DIAGRAM

⇐ MAIN SIGNAL PATH IN PLAYBACK MODE (VHS)

⇐□ MAIN SIGNAL PATH IN PLAYBACK MODE (S-VHS)



IC3505 AN78L09
OUTPUT Tr.
RSC
OVER CURR. PROTECT
POWER
REF VOLT.
AMP
PROTECT
STARTER
GND
FL3501 VLF0523
L3503 100μ
X3502 VSX0323
21.4MHz OSC
Q3508 2SC2295 (CLOCK GENE.)
IC3504 CXL1009P
FEEDBACK CIRCUIT
SYNC TIP CLAMP CIRCUIT
AUTOBIAS CIRCUIT (CLAMP)
OUTPUT CIRCUIT
CCD 680 BIT
CLOCK DRIVERS
TIMING GENERATOR CIRCUIT
P3506
REG 5V
1H DL OUT
REG 12.3V
FL3502 VLF0523
FL3504 VLF0526
L.P.F
P3507
1H DL IN
GND
FL3503 VLF0526
FL3505 ELB4H054
Q3507 2SB709 (AMP)
Q3506 2SC2295 (AMP)
L3510 VLP0053
1H DELAY CCD PACK C.B.A. (VEP03680A)
P3504
P3505
(TO LUMINANCE & CHROMINANCE) P3502
P3008-8 Y/C Y OUT
P3008-7 GND
P3008-6 Y/C C OUT
P3008-5 GND
P3008-4 REG 5V
P3008-3 REG 12.3V
P3008-2 HEAD SW
P3008-1 HEAD AMP SW
(TO PAL/SECAM TRANSCODER) P3503
P8003-1 JUMP OUT
P8003-2 GND
P8003-3 CORR. OUT
P8003-4 GND
(TO LUMINANCE & CHROMINANCE) P3501
P3007-6 EE Ⓗ
P3007-5 LP Ⓗ
P3007-4 HSS
P3007-3 S. CLOCK
P3007-2 S. DATA
P3007-1 GND
Q3509 2SC2295 (BUFFER)
Q3510 2SB709 (AMP)
IC3506 M52055FP
IC8503 BU5715F
GND NC X2BⒽ X2AⒽ JUMPⒽ C/RⒽ REVⒽ LPⒽ D/SⒽ
H.SW1 H.SW2 STILLⒽ LP1 EE1 S.DATA S.CLK NC VDD
JUMP LEVEL
JUMP VCO
Q3501 2SB709 (AMP)
IC3503 μPC1517CA
VCO 2fM
1/2
FF
AM MOD
CLAMP
BUFFER
DEMOD
JUMP DELAY LEVEL
Q3502 2SB709 (AMP)
Q3503 2SD601 (AMP)
IC3502 AN78L09
Q3505 2SC2295 (CLOCK GENE.)
X3501 VSX0189
13.3MHz OSC
D3501 MA151K
D3502 MA153
IC3501 TL8705P
CCD
CLOCK DRIVE
SYNC CLAMP
VDD
VCC
Q3504 2SB709 (AMP)
IC8501 AN3594K
MODE SW
LPF
MM
EF
HD OUT
Q8503 2SD601 (AMP)
DL8501 EFD-RT325A12B
0.5H DELAY
Q8502 2SD601 (BUFFER)
0.5H CHROMA DELAY
Q8501 2SC2295 (BUFFER)
DL8502 VLD0079
1H DELAY
CHROMA DELAY LEVEL
A B C D E F G
1 2 3 4 5 6 7 8 9 10 11 12

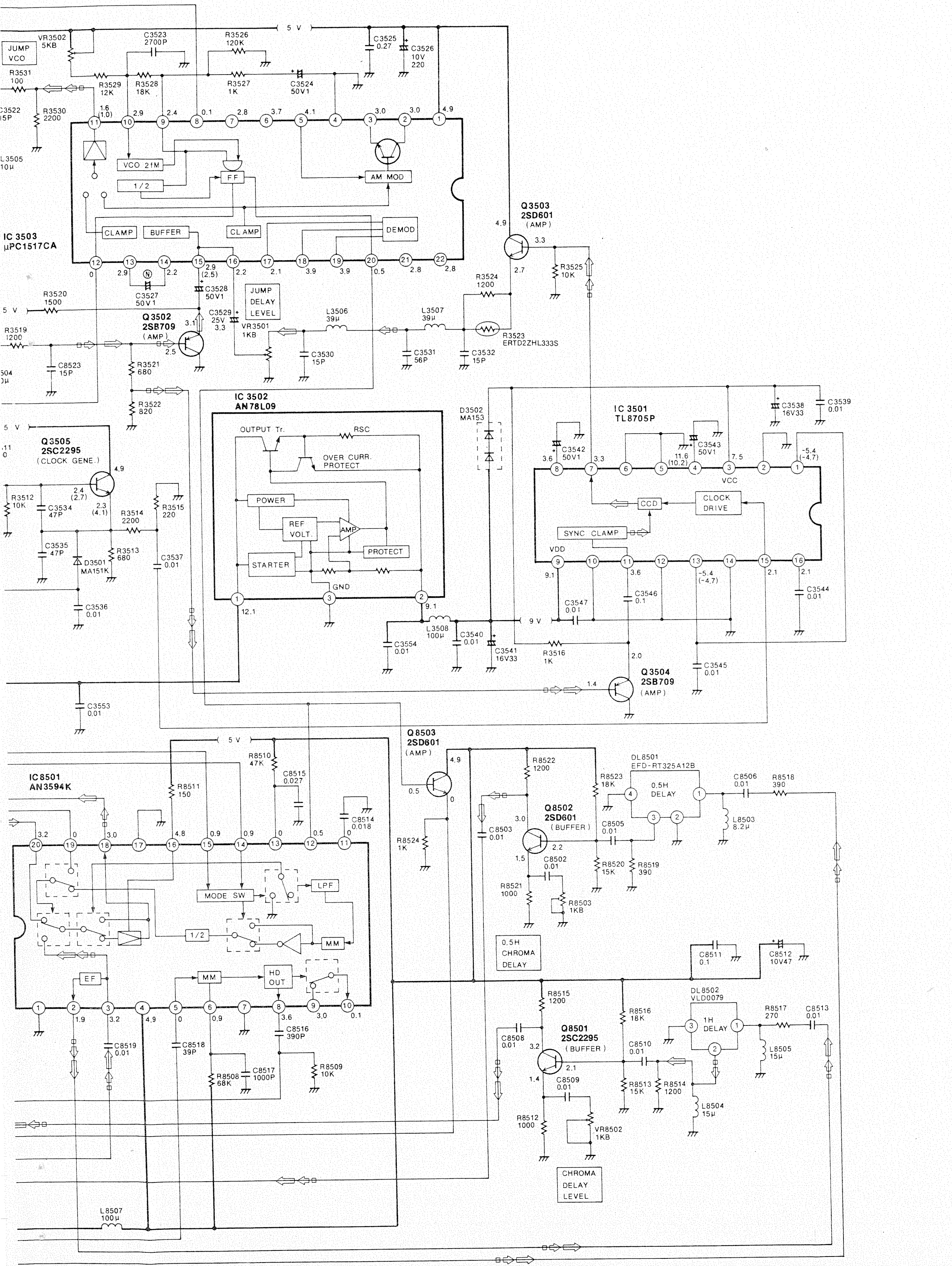
NOTE: WHEN SECAM SIGNAL IS RECORDED WITH S-VHS MODE OR LP MODE, SECAM SIGNAL IS AUTOMATICALLY CONVERTED TO PAL SIGNAL AND IT IS RECORDED.

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH SECAM COLOUR SIGNAL. (S-VHS : SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH SECAM COLOUR SIGNAL. (S-VHS : SP MODE)

NOTE: DO NOT USE ANY PART NUMBER S
SCHEMATIC DIAGRAM FOR ORDERIN
ORDER A PART, PLEASE REFER TO F

K MODE (VHS) ⇦ MAIN SIGNAL PATH IN PLAYBACK MODE (S-VHS)

3-20. SUB LUMINANCE & CHROMINANCE C.B.A. (VEP03677A)

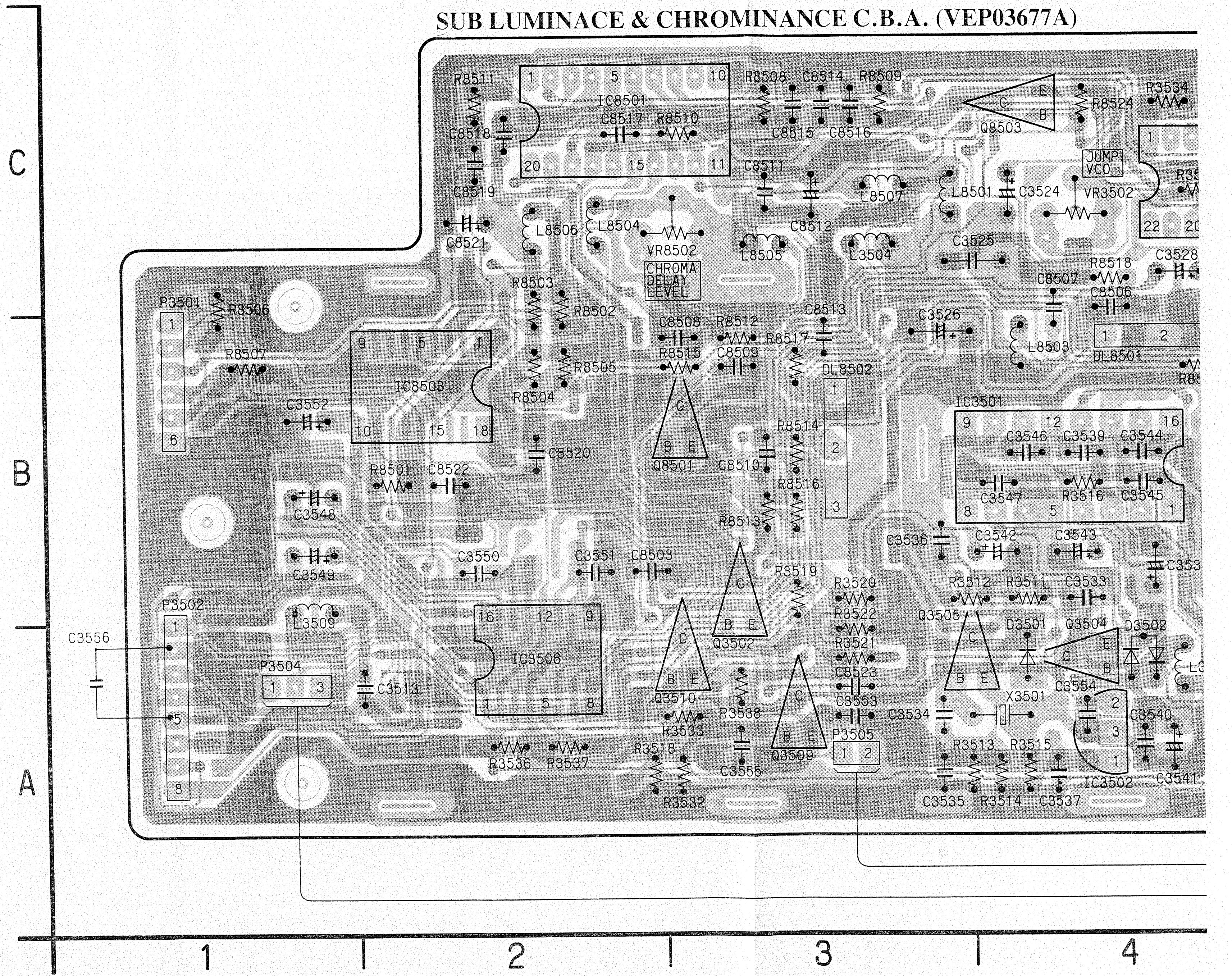


JUMP VCO
VR3502 5KB
C3523 2700P
R3526 120K
5 V
C3525 0.27
C3526 10V 220
R3531 100
R3529 12K
R3528 18K
R3527 1K
C3524 50V1
R3530 2200
VCO 21M
1/2
F.F
AM MOD
CLAMP
BUFFER
CL AMP
DEMOD
IC 3503
μPC1517CA
Q3503
2SD601
(AMP)
R3525 10K
R3524 1200
C3527 50V1
C3528 50V1
C3529 25V 3.3
JUMP DELAY LEVEL
VR3501 1KB
L3506 39μ
L3507 39μ
R3523 ERTD2ZHL333S
R3520 1500
Q3502
2SB709
(AMP)
R3519 1200
C8523 15P
R3521 680
C3530 15P
C3531 56P
C3532 15P
R3522 820
IC 3502
AN78L09
OUTPUT Tr.
RSC
OVER CURR. PROTECT
POWER
REF VOLT.
AMP
PROTECT
STARTER
GND
D3502 MA153
IC 3501
TL8705P
C3542 50V1
C3543 50V1
C3538 16V33
C3539 0.01
VCC
CCD
CLOCK DRIVE
SYNC CLAMP
VDD
Q3505
2SC2295
(CLOCK GENE.)
R3512 10K
C3534 47P
R3514 2200
R3515 220
C3535 47P
D3501 MA151K
R3513 680
C3537 0.01
C3536 0.01
C3547 0.01
C3546 0.1
C3544 0.01
L3508 100μ
C3540 0.01
C3554 0.01
C3541 16V33
R3516 1K
C3545 0.01
Q3504
2SB709
(AMP)
C3553 0.01
Q8503
2SD601
(AMP)
IC8501
AN3594K
R8510 47K
C8515 0.027
R8511 150
C8514 0.018
R8524 1K
R8522 1200
R8523 18K
DL8501 EFD-RT325A12B
0.5H DELAY
C8506 0.01
R8518 390
L8503 8.2μ
C8503 0.01
Q8502
2SD601
(BUFFER)
C8505 0.01
C8502 0.01
R8520 15K
R8519 390
R8521 1000
R8503 1KB
0.5H CHROMA DELAY
MODE SW
LPF
MM
EF
HD OUT
C8511 0.1
C8512 10V47
R8515 1200
DL8502 VLD0079
1H DELAY
R8517 270
C8513 0.01
C8508 0.01
Q8501
2SC2295
(BUFFER)
C8510 0.01
R8516 18K
L8505 15μ
C8509 0.01
R8513 15K
R8514 1200
L8504 15μ
R8512 1000
VR8502 1KB
CHROMA DELAY LEVEL
C8519 0.01
C8518 39P
R8508 68K
C8517 1000P
C8516 390P
R8509 10K
L8507 100μ

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH SECAM COLOUR SIGNAL. (S-VHS: SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH SECAM COLOUR SIGNAL. (S-VHS: SP MODE)

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

8 9 10 11 12



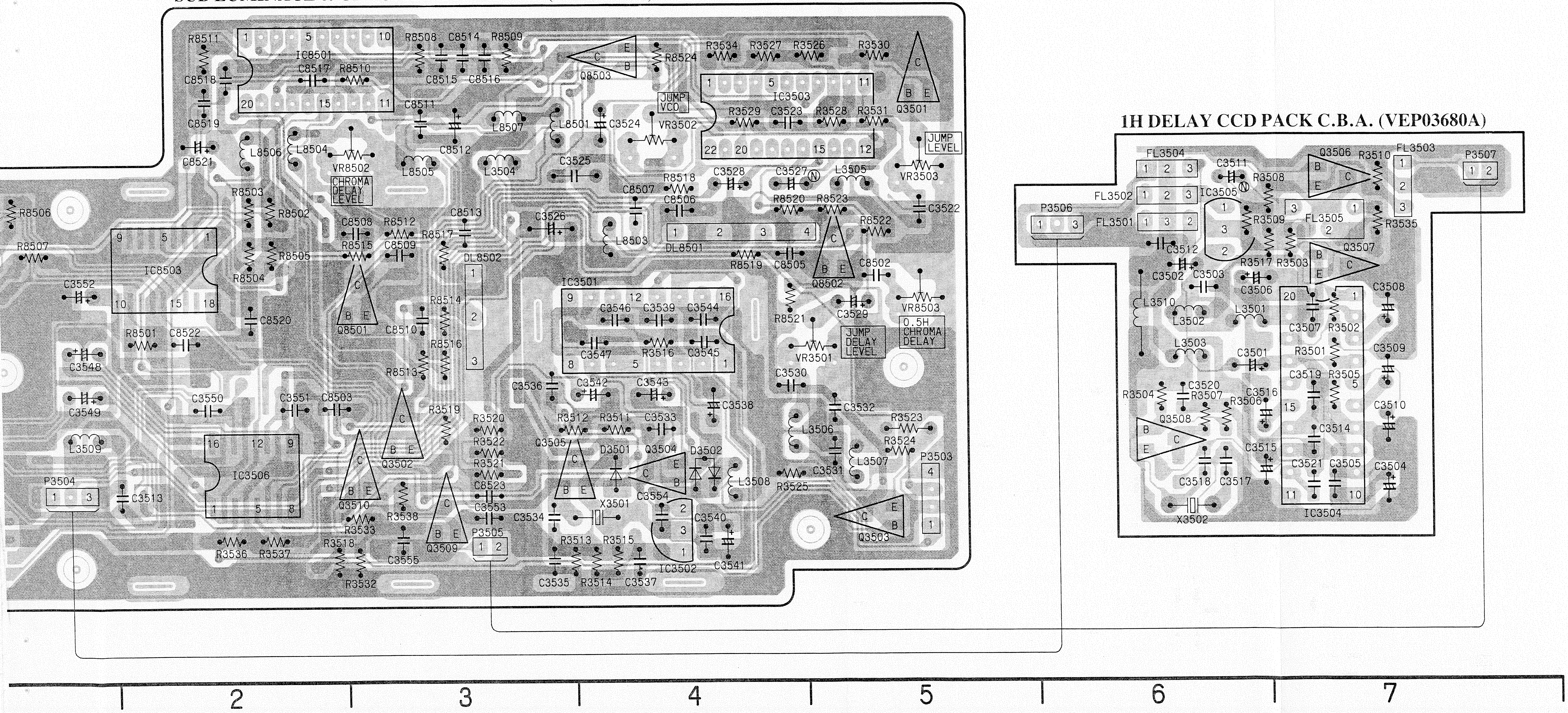
SUB LUMINACE & CHROMINANCE C.B.A. (VEP03677A)
C
B
A
1
2
3
4
IC8501
R8511
C8518
C8519
C8521
C8517
R8510
R8508
C8514
R8509
C8515
C8516
Q8503
R8524
R3534
JUMP VCO
VR3502
C8511
C8512
L8507
L8501
C3524
L8506
L8504
VR8502
CHROMA DELAY LEVEL
L8505
L3504
C3525
R8518
C3528
C8507
C8506
P3501
R8506
R8507
R8503
R8502
R8505
R8504
IC8503
C3552
C8508
R8512
R8515
R8517
C8509
C8513
DL8502
C3526
L8503
DL8501
IC3501
C3546
C3539
C3544
C3547
R3516
C3545
C8520
Q8501
C8510
R8514
R8516
R8513
R8501
C8522
C3548
C3549
C3550
C3551
C8503
R3519
C3536
C3542
C3543
C3553
P3502
C3556
L3509
P3504
C3513
IC3506
Q3502
R3520
R3522
R3521
C8523
C3553
Q3510
R3533
R3538
Q3509
P3505
C3534
R3536
R3537
R3518
R3532
C3555
Q3505
R3512
R3511
C3533
D3501
Q3504
D3502
X3501
C3554
C3540
R3513
R3515
IC3502
C3541
C3535
R3514
C3537

SUB LUMINANCE & CHROMINANCE C.B.A.	
Transistor	
Q3501	C-5
Q3502	A-3
Q3503	A-5
Q3504	A-4
Q3505	B-3
Q3506	C-7
Q3507	B-7
Q3508	B-6
Q3509	A-3
Q3510	A-3
Q8501	B-3
Q8502	B-5
Q8503	C-4
Integrated Circuit	
IC3501	B-4
IC3502	A-4
IC3503	C-4
IC3504	A-7
IC3505	C-6
IC3506	A-2
IC8501	C-2
IC8503	B-2
Adjustment	
VR3501	B-5
VR3502	C-4
VR3503	C-5
VR8502	C-2
VR8503	B-5
Connector	
P3501	C-1
P3502	B-1
P3503	A-5
P3504	A-1
P3505	A-3
P3506	B-6
P3507	C-7

ADDRESS INFORMATION

SUB LUMINACE & CHROMINANCE C.B.A. (VEP03677A)

1H DELAY CCD PACK C.B.A. (VEP03680A)

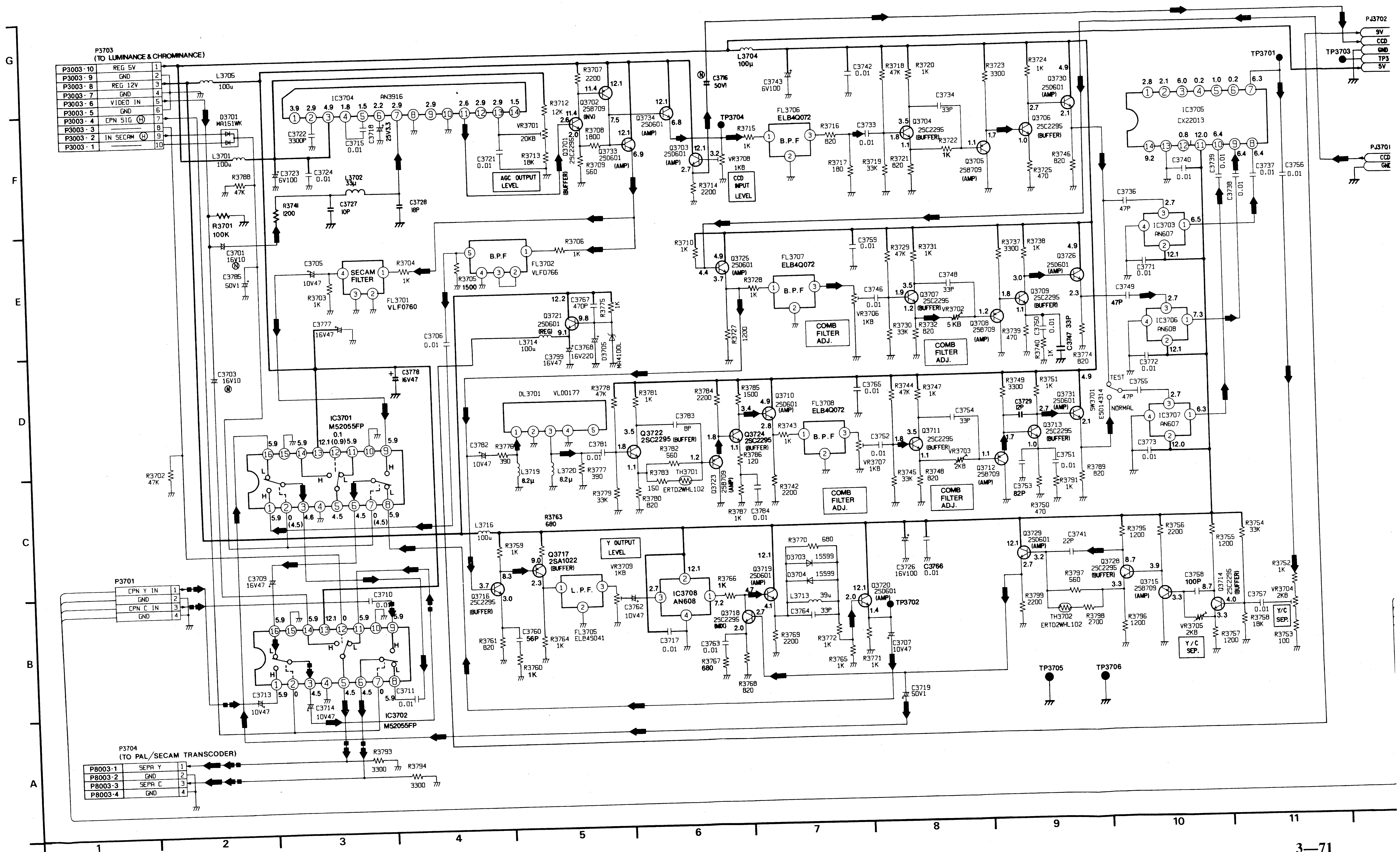

IC8501
IC8503
IC3501
IC3502
IC3503
IC3506
Q8501
Q8502
Q8503
Q3501
Q3502
Q3503
Q3504
Q3505
Q3509
Q3510
DL8501
DL8502
JUMP VCO
VR3502
CHROMA DELAY LEVEL
VR8502
JUMP LEVEL
VR3503
JUMP DELAY LEVEL
VR3501
0.5H CHROMA DELAY
VR8503
P3503
P3504
P3505
X3501
IC3504
IC3505
Q3506
Q3507
Q3508
FL3501
FL3502
FL3503
FL3504
FL3505
X3502
P3506
P3507
2
3
4
5
6
7

Next Page:
LUMINANCE & CHROMINANCE
SEPARATION Section

3-21. LUMINANCE & CHROMINANCE SEPARATION SCHEMATIC DIAGRAM

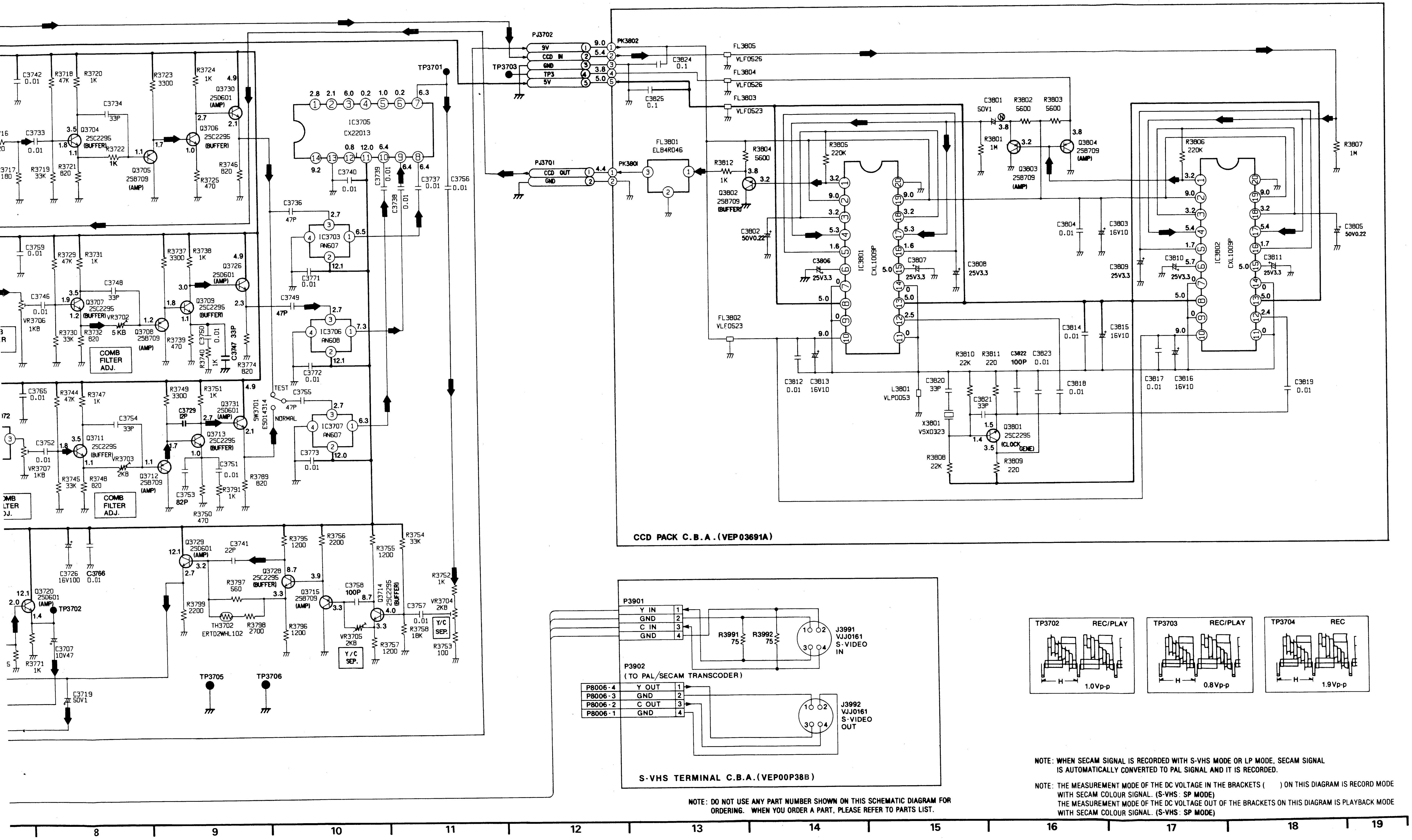
MAIN SIGNAL PATH IN REC MODE (VHS)

MAIN SIGNAL PATH IN REC MOD



P3703
(TO LUMINANCE & CHROMINANCE)
P3003-10 REG 5V
P3003-9 GND
P3003-8 REG 12V
P3003-7 GND
P3003-6 VIDEO IN
P3003-5 GND
P3003-4 CPN SIG (H)
P3003-3
P3003-2 IN SECAM (H)
P3003-1
IC3704 AN3916
AGC OUTPUT LEVEL
VR3701 20KB
SECAM FILTER
FL3701 VLF0760
B.P.F
FL3702 VLF0766
IC3701 M52055FP
IC3702 M52055FP
L3704 100µ
TP3704
CCD INPUT LEVEL
VR3708 1KB
FL3706 ELB4Q072
FL3707 ELB4Q072
FL3708 ELB4Q072
COMB FILTER ADJ.
VR3702 5KB
VR3703 2KB
VR3706 1KB
VR3707 1KB
DL3701 VLD0177
L3719 8.2µ
L3720 8.2µ
TH3701 ERTD2WHL102
Y OUTPUT LEVEL
VR3709 1KB
L.P.F.
FL3705 ELB45041
IC3708 AN608
TP3702
TP3701
TP3703
TP3705
TP3706
PJ3702
9V
CCD
GND
TP3
5V
PJ3701
CCD
GND
IC3705 CX22013
IC3703 AN607
IC3706 AN608
IC3707 AN607
SW3701 ESD14314
TEST
NORMAL
TH3702 ERTD2WHL102
VR3705 2KB
VR3704 2KB
Y/C SEP.
P3701
CPN Y IN
GND
CPN C IN
GND
P3704
(TO PAL/SECAM TRANSCODER)
P8003-1 SEPA Y
P8003-2 GND
P8003-3 SEPA C
P8003-4 GND
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11

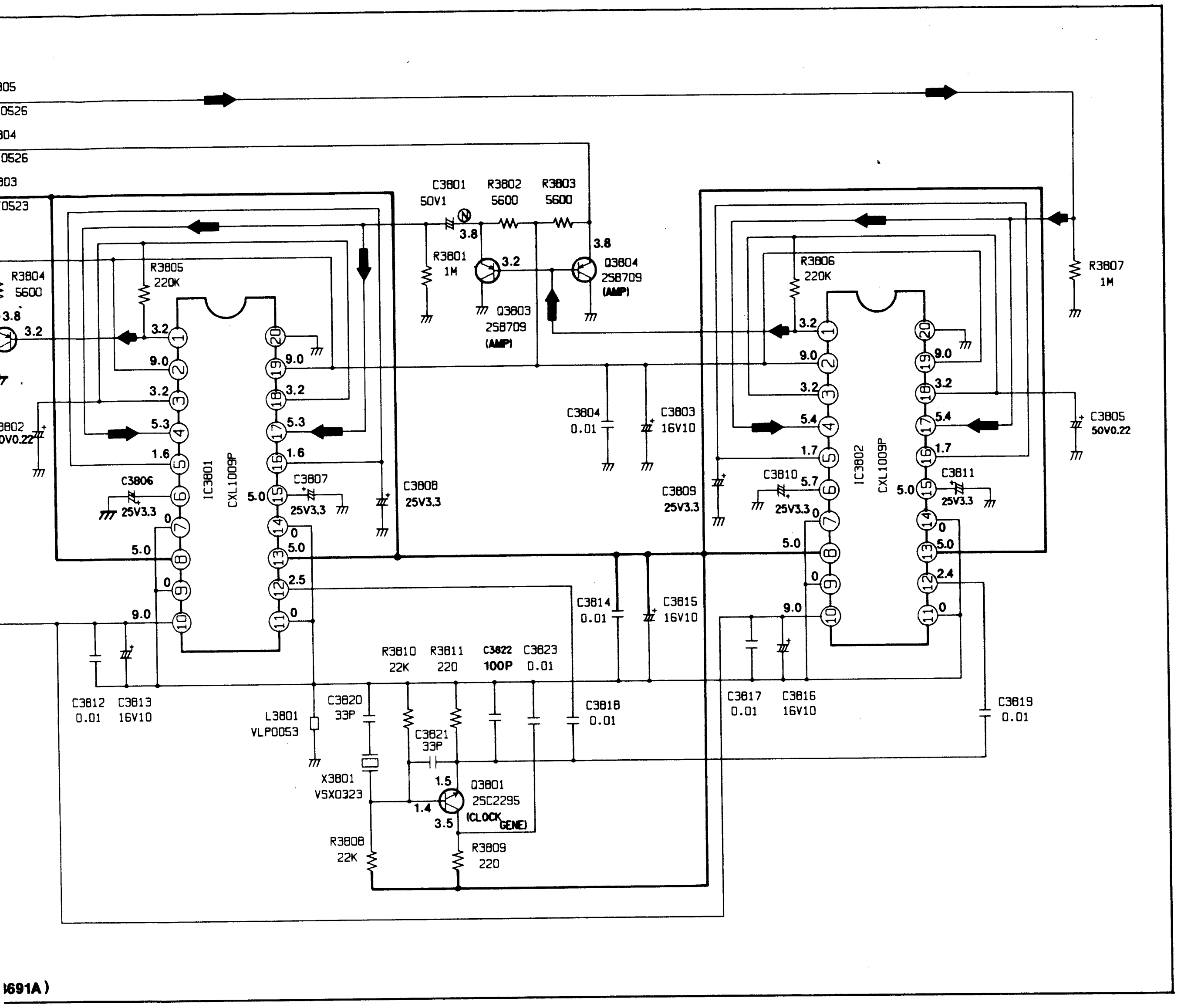
NAL PATH IN REC MODE (VHS)   MAIN SIGNAL PATH IN REC MODE (S-VHS)

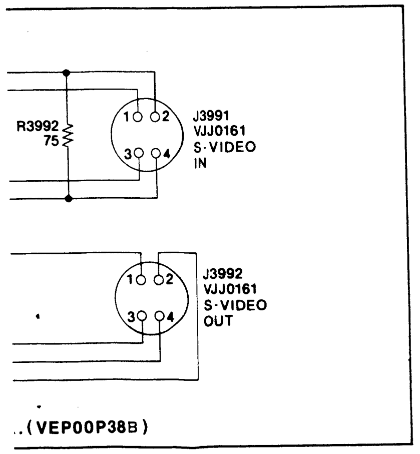

PJ3702
9V
CCD IN
GND
TP3
5V
PK3802
TP3701
TP3703
IC3705
CX22013
PJ3701
CCD OUT
GND
PK3801
FL3801
ELB4R046
FL3805
VLF0526
FL3804
VLF0526
FL3803
VLF0523
FL3802
VLF0523
C3824
0.1
C3825
0.1
R3812
1K
Q3802
2SB709
(BUFFER)
R3804
5600
R3805
220K
IC3801
CXL1009P
IC3802
CXL1009P
C3801
50V1
R3802
5600
R3803
5600
R3801
1M
Q3803
2SB709
(AMP)
Q3804
2SB709
(AMP)
R3806
220K
R3807
1M
C3802
50V0.22
C3806
25V3.3
C3807
25V3.3
C3808
25V3.3
C3804
0.01
C3803
16V10
C3809
25V3.3
C3810
25V3.3
C3811
25V3.3
C3805
50V0.22
C3814
0.01
C3815
16V10
C3812
0.01
C3813
16V10
L3801
VLP0053
C3820
33P
R3810
22K
R3811
220
C3822
100P
C3823
0.01
C3821
33P
X3801
VSX0323
Q3801
2SC2295
(CLOCK GENE)
R3808
22K
R3809
220
C3818
0.01
C3817
0.01
C3816
16V10
C3819
0.01
CCD PACK C.B.A.(VEP03691A)
Q3704
2SC2295
(BUFFER)
Q3705
2SB709
(AMP)
Q3706
2SC2295
(BUFFER)
Q3730
2SD601
(AMP)
Q3707
2SC2295
(BUFFER)
Q3708
2SB709
(AMP)
Q3709
2SC2295
(BUFFER)
Q3726
2SD601
(AMP)
Q3711
2SC2295
(BUFFER)
Q3712
2SB709
(AMP)
Q3713
2SC2295
(BUFFER)
Q3731
2SD601
(AMP)
IC3703
AN607
IC3706
AN608
IC3707
AN607
SW3701
ESD14314
TEST
NORMAL
COMB FILTER ADJ.
VR3702
5KB
VR3703
2KB
VR3706
1KB
VR3707
1KB
Q3729
2SD601
(AMP)
Q3728
2SC2295
(BUFFER)
Q3715
2SB709
(AMP)
Q3714
2SC2295
(BUFFER)
Q3720
2SD601
(AMP)
TP3702
TH3702
ERTD2WHL102
VR3705
2KB
VR3704
2KB
Y/C SEP.
TP3705
TP3706
C3707
10V47
C3719
50V1
C3726
16V100
C3766
0.01
P3901
Y IN
GND
C IN
GND
R3991
75
R3992
75
J3991
VJJ0161
S-VIDEO
IN
P3902
(TO PAL/SECAM TRANSCODER)
P8006-4
P8006-3
P8006-2
P8006-1
Y OUT
GND
C OUT
GND
J3992
VJJ0161
S-VIDEO
OUT
S-VHS TERMINAL C.B.A.(VEP00P38B)
TP3702 REC/PLAY
1.0Vp-p
TP3703 REC/PLAY
0.8Vp-p
TP3704 REC
1.9Vp-p
H
8
9
10
11
12
13
14
15
16
17
18
19

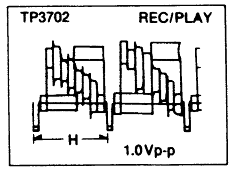
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

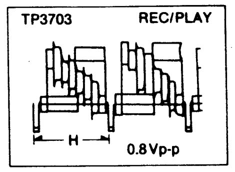
NOTE: WHEN SECAM SIGNAL IS RECORDED WITH S-VHS MODE OR LP MODE, SECAM SIGNAL IS AUTOMATICALLY CONVERTED TO PAL SIGNAL AND IT IS RECORDED.

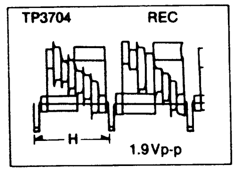
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS (   ) ON THIS DIAGRAM IS RECORD MODE WITH SECAM COLOUR SIGNAL. (S-VHS: SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH SECAM COLOUR SIGNAL. (S-VHS: SP MODE)


C3801
50V1
R3802
5600
R3803
5600
R3801
1M
Q3803
2SB709
(AMP)
Q3804
2SB709
(AMP)
R3804
5600
R3805
220K
IC3801
CXL1009P
C3806
25V3.3
C3807
25V3.3
C3808
25V3.3
C3804
0.01
C3803
16V10
C3809
25V3.3
R3806
220K
IC3802
CXL1009P
C3810
25V3.3
C3811
25V3.3
R3807
1M
C3805
50V0.22
C3802
50V0.22
C3812
0.01
C3813
16V10
L3801
VLP0053
C3820
33P
C3821
33P
X3801
VSX0323
Q3801
2SC2295
(CLOCK GENE)
R3808
22K
R3809
220
R3810
22K
R3811
220
C3822
100P
C3823
0.01
C3814
0.01
C3815
16V10
C3818
0.01
C3817
0.01
C3816
16V10
C3819
0.01
3691A)


R3992
75
J3991
VJJ0161
S-VIDEO
IN
J3992
VJJ0161
S-VIDEO
OUT
..(VEP00P38B)







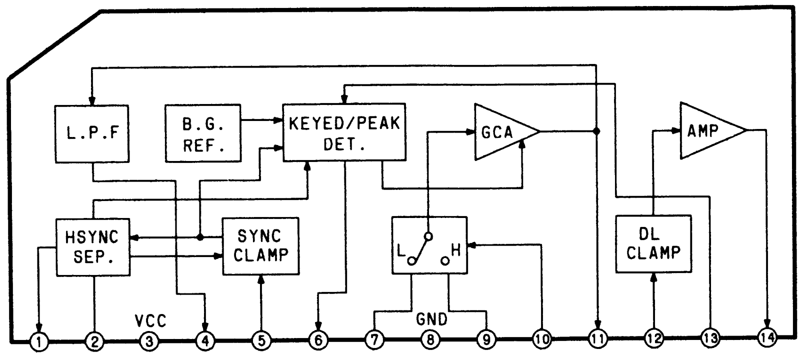
ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR
WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

NOTE: WHEN SECAM SIGNAL IS RECORDED WITH S-VHS MODE OR LP MODE, SECAM SIGNAL IS AUTOMATICALLY CONVERTED TO PAL SIGNAL AND IT IS RECORDED.

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH SECAM COLOUR SIGNAL. (S-VHS: SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH SECAM COLOUR SIGNAL. (S-VHS: SP MODE)

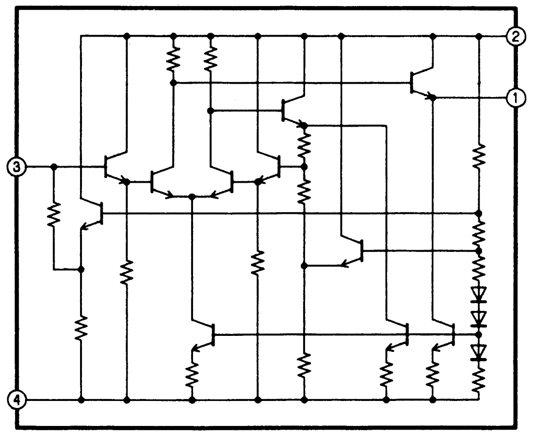
IC BLOCK

IC3704 (AN3916)


L.P.F
B.G.
REF.
KEYED/PEAK
DET.
GCA
AMP
HSYNC
SEP.
SYNC
CLAMP
L
H
DL
CLAMP
VCC
GND
1
2
3
4
5
6
7
8
9
10
11
12
13
14

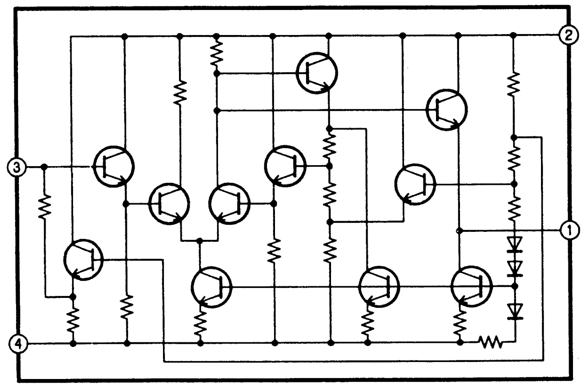
IC3703, IC3707 (AN607)

(WIDE BAND AMPLIFIER)



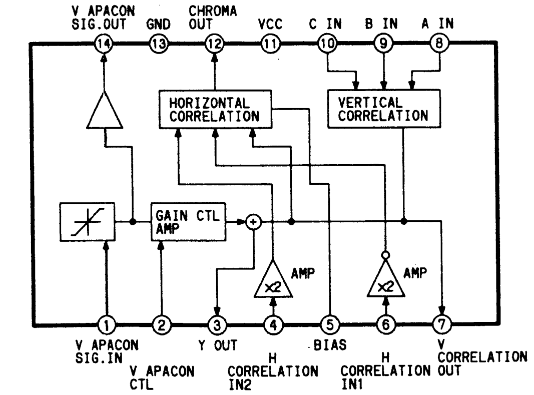
IC3706, IC3708 (AN608)

(WIDE BAND AMPLIFIER)

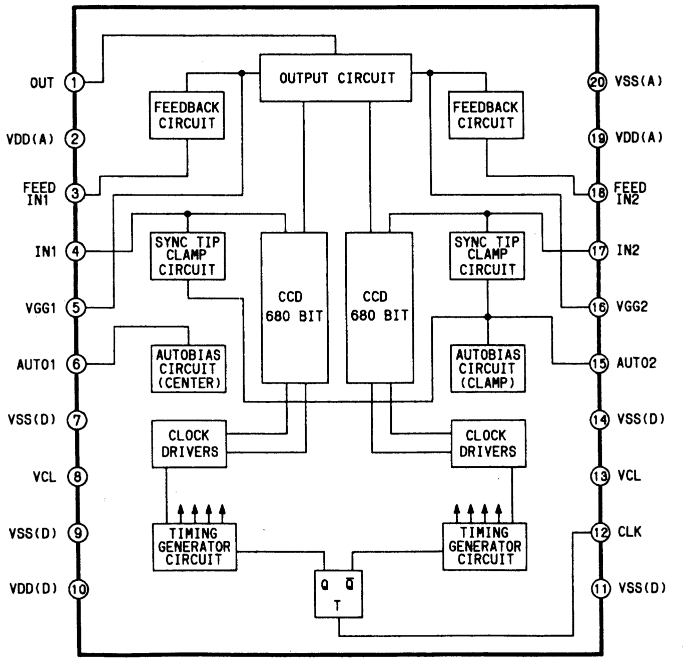


IC3705 (CX22013)

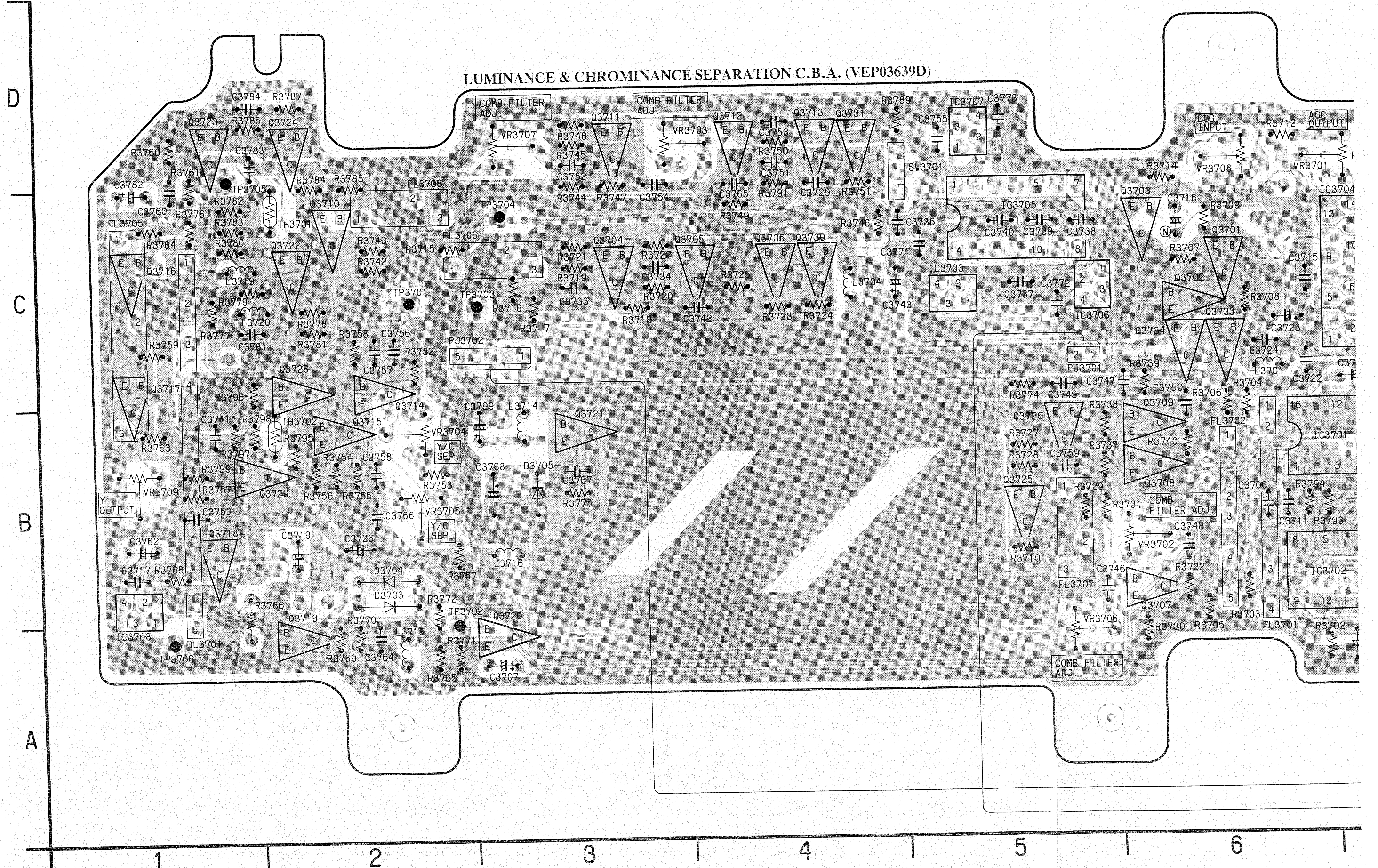
(DYNAMIC COMB FILTER)


V APACON SIG.OUT
GND
CHROMA OUT
VCC
C IN
B IN
A IN
14
13
12
11
10
9
8
HORIZONTAL CORRELATION
VERTICAL CORRELATION
GAIN CTL AMP
x2 AMP
x2 AMP
1
2
3
4
5
6
7
V APACON SIG.IN
V APACON CTL
Y OUT
H CORRELATION IN2
BIAS
H CORRELATION IN1
V CORRELATION OUT

IC3801, IC3802 (CXL1009P)


OUT 1
VDD(A) 2
FEED IN1 3
IN1 4
VGG1 5
AUTO1 6
VSS(D) 7
VCL 8
VSS(D) 9
VDD(D) 10
20 VSS(A)
19 VDD(A)
18 FEED IN2
17 IN2
16 VGG2
15 AUTO2
14 VSS(D)
13 VCL
12 CLK
11 VSS(D)
OUTPUT CIRCUIT
FEEDBACK CIRCUIT
FEEDBACK CIRCUIT
SYNC TIP CLAMP CIRCUIT
SYNC TIP CLAMP CIRCUIT
CCD 680 BIT
CCD 680 BIT
AUTOBIAS CIRCUIT (CENTER)
AUTOBIAS CIRCUIT (CLAMP)
CLOCK DRIVERS
CLOCK DRIVERS
TIMING GENERATOR CIRCUIT
TIMING GENERATOR CIRCUIT
Q
Q̄
T

3-22. LUMINANCE & CHROMINANCE SEPARATION C.B.A. (VEP03639D)


LUMINANCE & CHROMINANCE SEPARATION C.B.A. (VEP03639D)
D
C
B
A
1
2
3
4
5
6
COMB FILTER ADJ.
COMB FILTER ADJ.
COMB FILTER ADJ.
COMB FILTER ADJ.
CCD INPUT
AGC OUTPUT
Y OUTPUT
Y/C SEP.
Y/C SEP.
VR3707
VR3703
VR3708
VR3701
VR3704
VR3705
VR3709
VR3702
VR3706
IC3707
IC3705
IC3703
IC3706
IC3704
IC3701
IC3702
IC3708
SW3701
PJ3702
PJ3701
FL3708
FL3706
FL3705
FL3702
FL3707
FL3701
DL3701
TH3701
TH3702
TP3701
TP3702
TP3703
TP3704
TP3705
TP3706
D3703
D3704
D3705
L3701
L3704
L3713
L3714
L3716
L3719
L3720
Q3701
Q3702
Q3703
Q3704
Q3705
Q3706
Q3707
Q3708
Q3709
Q3710
Q3711
Q3712
Q3713
Q3714
Q3715
Q3716
Q3717
Q3718
Q3719
Q3720
Q3721
Q3722
Q3723
Q3724
Q3725
Q3726
Q3728
Q3729
Q3730
Q3731
Q3733
Q3734
C3784
R3787
R3786
C3783
R3760
R3761
C3782
C3760
R3776
R3782
R3783
R3780
R3764
R3784
R3785
R3743
R3742
R3715
R3779
R3777
C3781
R3778
R3781
R3759
R3758
C3756
R3752
C3757
R3796
R3798
C3741
R3795
R3797
R3763
R3799
R3767
C3763
R3754
C3758
R3756
R3755
R3753
C3766
C3719
C3726
C3762
C3717
R3768
R3766
R3770
R3769
C3764
R3772
R3771
R3765
C3707
R3757
C3799
C3768
C3767
R3775
R3716
R3717
R3748
R3745
C3752
R3744
R3747
C3754
C3753
R3750
C3751
C3765
R3749
R3791
C3729
R3751
R3789
C3755
C3773
R3746
C3736
C3771
C3743
C3740
C3739
C3738
C3772
C3737
R3721
R3719
C3733
R3722
C3734
R3720
R3718
C3742
R3725
R3723
R3724
R3714
C3716
R3709
R3707
R3708
C3723
C3724
C3722
C3715
R3712
R3739
C3747
C3750
R3706
R3704
R3774
C3749
R3738
R3737
R3740
R3727
R3728
C3759
R3729
R3731
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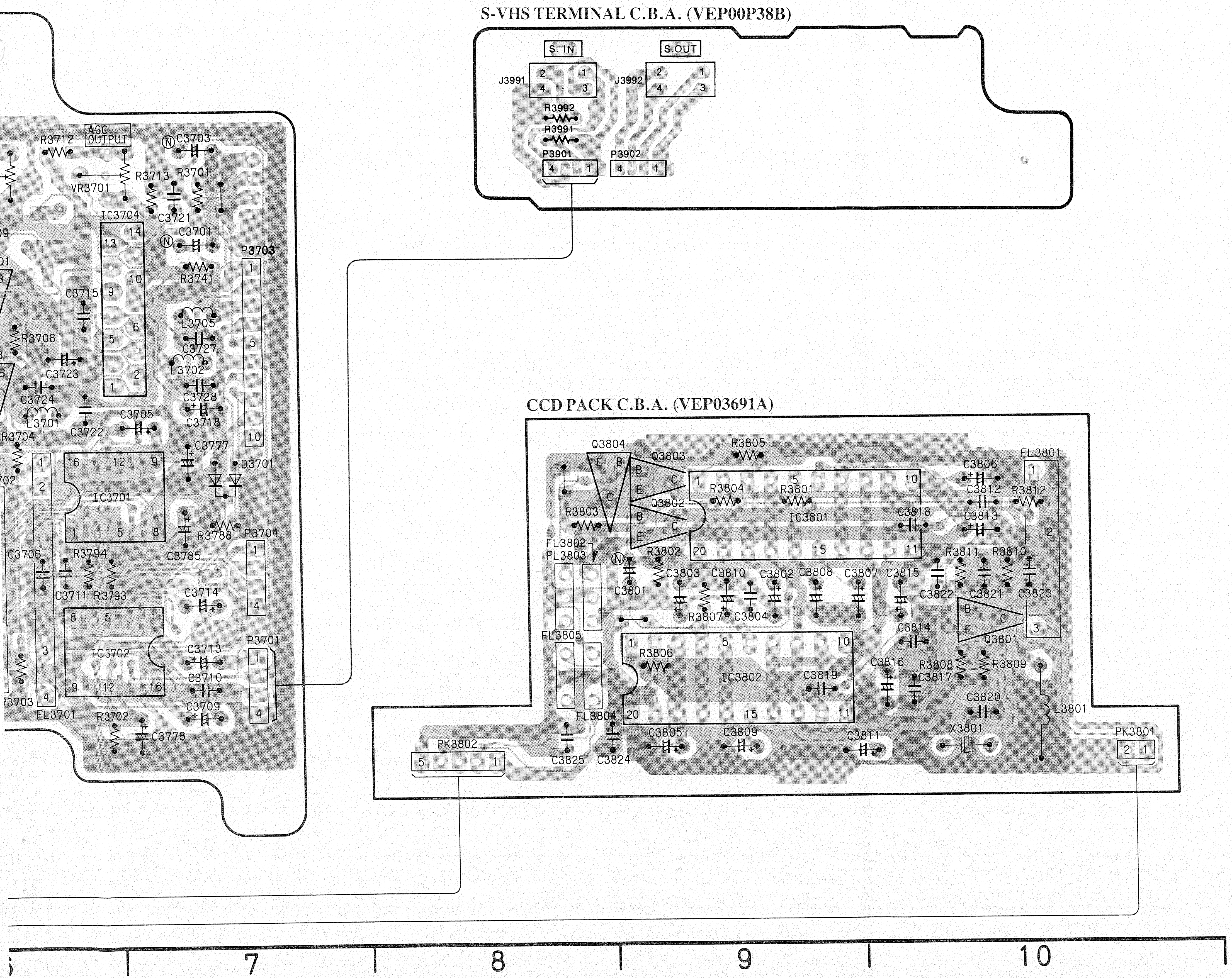
R3702
C3706
C3711
R3794
R3793


S-VHS TERMINAL C.B.A. (VEP00P38B)
S. IN
S.OUT
J3991
J3992
R3992
R3991
P3901
P3902
CCD PACK C.B.A. (VEP03691A)
Q3804
Q3803
Q3802
Q3801
R3805
R3804
R3801
R3803
R3802
R3806
R3807
R3808
R3809
R3810
R3811
R3812
IC3801
IC3802
FL3801
FL3802
FL3803
FL3804
FL3805
C3801
C3802
C3803
C3804
C3805
C3806
C3807
C3808
C3809
C3810
C3811
C3812
C3813
C3814
C3815
C3816
C3817
C3818
C3819
C3820
C3821
C3822
C3823
C3824
C3825
X3801
L3801
PK3801
PK3802
R3712
AGC OUTPUT
C3703
VR3701
R3713
R3701
C3721
IC3704
C3701
R3741
P3703
C3715
L3705
C3727
R3708
C3723
L3702
C3724
C3728
L3701
C3718
C3705
C3722
R3704
C3777
D3701
IC3701
R3788
P3704
C3785
C3706
R3794
C3711
R3793
C3714
IC3702
C3713
P3701
C3710
C3709
R3702
C3778
FL3701
7
8
9
10

LUMINANCE & CHROMINANCE SEPARATION C.B.A.

Transistor	
Q3701	C-6
Q3702	C-6
Q3703	C-6
Q3704	C-3
Q3705	C-4
Q3706	C-4
Q3707	B-6
Q3708	B-6
Q3709	B-6
Q3710	C-2
Q3711	D-3
Q3712	D-4
Q3713	D-4
Q3714	C-2
Q3715	B-2
Q3716	C-1
Q3717	C-1
Q3718	B-1
Q3719	B-2
Q3720	B-3
Q3721	B-3
Q3722	C-2
Q3723	D-1
Q3724	D-2
Q3725	B-5
Q3726	B-5
Q3728	C-2
Q3729	B-2
Q3730	C-4
Q3731	D-4
Q3733	C-6
Q3734	C-6
Q3801	B-10
Q3802	B-9
Q3803	B-9
Q3804	B-8
Integrated Circuit	
IC3701	B-6
IC3702	B-6
IC3703	C-5
IC3704	C-7
IC3705	C-5
IC3706	C-5
IC3707	D-5
IC3708	A-1
IC3801	B-9
IC3802	B-9
Test Point	
TP3701	C-2
TP3702	B-2
TP3703	C-3
TP3704	C-3
TP3705	D-1
TP3706	A-1
Adjustment	
VR3701	D-6
VR3702	B-6
VR3703	D-3
VR3704	B-2
VR3705	B-2
VR3706	A-5
VR3707	D-3
VR3708	D-6
VR3709	B-1
Connector	
P3701	B-7
P3703	C-7
P3704	B-7
P3901	D-8
P3902	D-9
PJ3701	C-5
PJ3702	C-2
PK3801	A-10
PK3802	A-8

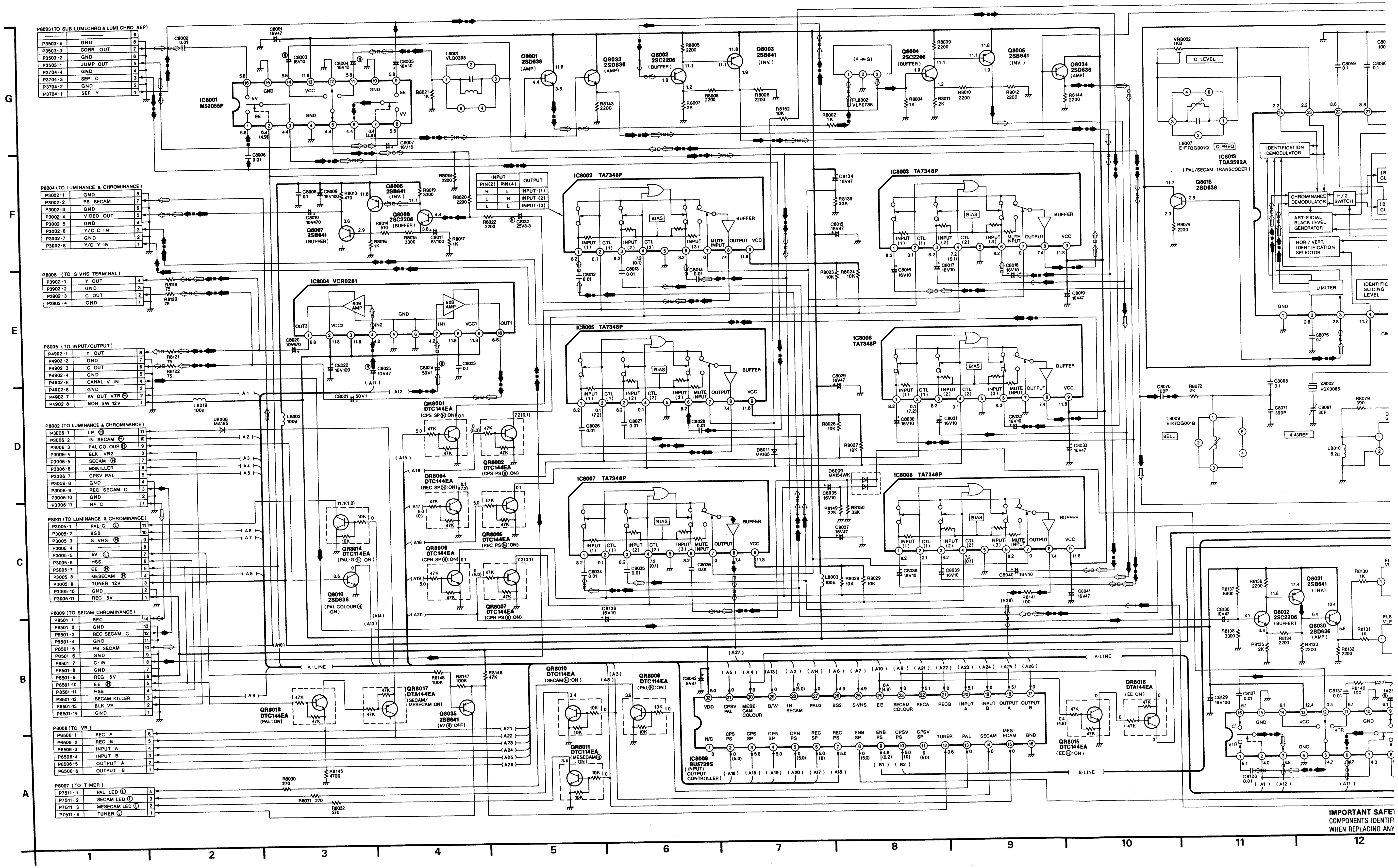
ADDRESS INFORMATION

3-23. PAL/SECAM TRANSCODER SCHEMATIC DIAGRAM

MAIN SIGNAL PATH IN REC MODE (VHS)

MAIN SIGNAL PATH IN REC MODE (S-VHS)

M



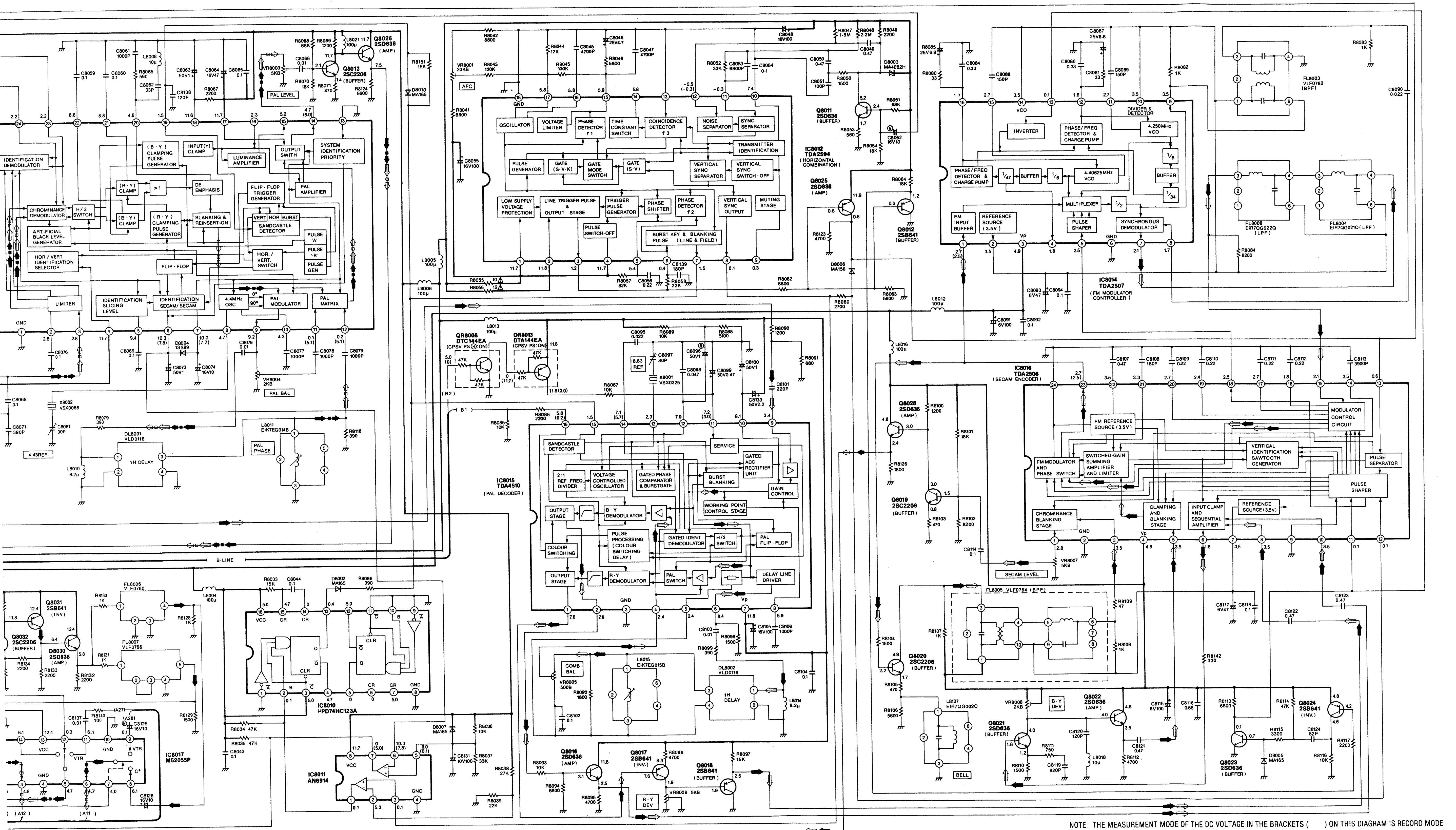
P8003 (TO SUB LUMI.CHRO & LUMI.CHRO SEP)
P8004 (TO LUMINANCE & CHROMINANCE)
P8006 (TO S-VHS TERMINAL)
P8005 (TO INPUT/OUTPUT)
P8002 (TO LUMINANCE & CHROMINANCE)
P8001 (TO LUMINANCE & CHROMINANCE)
P8009 (TO SECAM CHROMINANCE)
P8008 (TO VR)
P8007 (TO TIMER)
IC8001 M52055P
IC8002 TA7348P
IC8003 TA7348P
IC8004 VCR0281
IC8005 TA7348P
IC8006 TA7348P
IC8007 TA7348P
IC8008 TA7348P
IC8009 BU5739S (INPUT/OUTPUT CONTROLLER)
IC8013 TDA3592A (PAL/SECAM TRANSCODER)
Q8001 2SD636 (AMP)
Q8033 2SD636 (AMP)
Q8002 2SC2206 (BUFFER)
Q8003 2SB641 (INV.)
Q8004 2SC2206 (BUFFER)
Q8005 2SB641 (INV.)
Q8034 2SD636 (AMP)
Q8006 2SB641 (INV.)
Q8007 2SB641 (BUFFER)
Q8008 2SC2206 (BUFFER)
Q8010 2SD636 (PAL COLOUR Ⓗ ON)
Q8015 2SD636
Q8031 2SB641 (INV.)
Q8032 2SC2206 (BUFFER)
Q8030 2SD636 (AMP)
Q8035 2SB641 (AV Ⓗ OFF)
QR8001 DTC144EA (CPS SP Ⓗ ON)
QR8002 DTC144EA (CPS PS Ⓗ ON)
QR8004 DTC144EA (REC SP Ⓗ ON)
QR8005 DTC144EA (REC PS Ⓗ ON)
QR8006 DTC144EA (CPN SP Ⓗ ON)
QR8007 DTC144EA (CPN PS Ⓗ ON)
QR8014 DTC114EA (PAL·G Ⓗ ON)
QR8018 DTC144EA (PAL:ON)
QR8017 DTA144EA (SECAM/MESECAM:ON)
QR8010 DTC114EA (SECAM Ⓗ ON)
QR8009 DTC114EA (PAL Ⓗ ON)
QR8011 DTC114EA (MESECAM Ⓗ ON)
QR8016 DTA144EA (EE:ON)
QR8015 DTC144EA (EE Ⓗ ON)
FL8002 VLF0786
L8001 VLO0398
L8007 EIF7QG001Q
L8009 EIK7QG001B
X8002 VSX0066
VR8002 1KB
Q. LEVEL
Q.FREQ
BELL
4.43REF
IDENTIFICATION DEMODULATOR
CHROMINANCE DEMODULATOR
H/2 SWITCH
ARTIFICIAL BLACK LEVEL GENERATOR
HOR./VERT. IDENTIFICATION SELECTOR
LIMITER
IDENTIFIC SLICING LEVEL
INPUT PIN(2) PIN(4) OUTPUT
H L INPUT-(1)
L H INPUT-(2)
L L INPUT-(3)
A-LINE
B-LINE
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12

IMPORTANT SAFE
COMPONENTS IDENTIFI
WHEN REPLACING ANY

S)

MAIN SIGNAL PATH IN PLAYBACK MODE (VHS)

MAIN SIGNAL PATH IN PLAYBACK MODE (S-VHS)


IC8012
TDA2594
(HORIZONTAL COMBINATION)
IC8014
TDA2507
(FM MODULATOR CONTROLLER)
IC8015
TDA4510
(PAL DECODER)
IC8016
TDA2506
(SECAM ENCODER)
IC8010
μPD74HC123A
IC8011
AN6914
IC8017
M52055P
Q8026 2SD636 (AMP)
Q8013 2SC2206 (BUFFER)
Q8011 2SD636 (BUFFER)
Q8025 2SD636 (AMP)
Q8012 2SB641 (BUFFER)
QR8008 DTC144EA
QR8013 DTA144EA
Q8028 2SD636 (AMP)
Q8019 2SC2206 (BUFFER)
Q8020 2SC2206 (BUFFER)
Q8021 2SD636 (BUFFER)
Q8022 2SD636 (AMP)
Q8023 2SD636 (BUFFER)
Q8024 2SB641 (INV.)
Q8016 2SD636 (AMP)
Q8017 2SB641 (INV.)
Q8018 2SB641 (BUFFER)
Q8031 2SB641 (INV)
Q8032 2SC2206 (BUFFER)
Q8030 2SD636 (AMP)
IDENTIFICATION DEMODULATOR
CHROMINANCE DEMODULATOR
H/2 SWITCH
ARTIFICIAL BLACK LEVEL GENERATOR
HOR./VERT. IDENTIFICATION SELECTOR
LIMITER
IDENTIFICATION SLICING LEVEL
IDENTIFICATION SECAM/SECAM
4.4MHz OSC
PAL MODULATOR
PAL MATRIX
FLIP-FLOP
SYSTEM IDENTIFICATION PRIORITY
LUMINANCE AMPLIFIER
OUTPUT SWITH
PAL AMPLIFIER
FLIP-FLOP TRIGGER GENERATOR
SANDCASTLE DETECTOR
DE-EMPHASIS
BLANKING & REINSERTION
OSCILLATOR
VOLTAGE LIMITER
PHASE DETECTOR f1
TIME CONSTANT SWITCH
COINCIDENCE DETECTOR f3
NOISE SEPARATOR
SYNC SEPARATOR
TRANSMITTER IDENTIFICATION
VERTICAL SYNC SEPARATOR
VERTICAL SYNC SWITCH-OFF
PULSE GENERATOR
LOW SUPPLY VOLTAGE PROTECTION
LINE TRIGGER PULSE & OUTPUT STAGE
TRIGGER PULSE GENERATOR
PHASE SHIFTER
PHASE DETECTOR f2
VERTICAL SYNC OUTPUT
MUTING STAGE
BURST KEY & BLANKING PULSE (LINE & FIELD)
VCO
INVERTER
PHASE/FREQ DETECTOR & CHARGE PUMP
DIVIDER & DETECTOR
4.250MHz VCO
4.40625MHz VCO
MULTIPLEXER
FM INPUT BUFFER
REFERENCE SOURCE (3.5V)
PULSE SHAPER
SYNCHRONOUS DEMODULATOR
FL8003 VLF0762 (BPF)
FL8008 EIR7QG022Q (LPF)
FL8004 EIR7QG021Q (LPF)
FL8005 VLF0764 (BPF)
FL8006 VLF0760
FL8007 VLF0786
DL8001 VLD0116
DL8002 VLD0116
1H DELAY
SERVICE
GATED ACC RECTIFIER UNIT
GAIN CONTROL
BURST BLANKING
WORKING POINT CONTROL STAGE
2:1 REF. FREQ. DIVIDER
VOLTAGE CONTROLLED OSCILLATOR
GATED PHASE COMPARATOR & BURSTGATE
B-Y DEMODULATOR
R-Y DEMODULATOR
OUTPUT STAGE
COLOUR SWITCHING
PULSE PROCESSING (COLOUR SWITCHING DELAY)
GATED IDENT DEMODULATOR
PAL FLIP-FLOP
PAL SWITCH
DELAY LINE DRIVER
FM REFERENCE SOURCE (3.5V)
FM MODULATOR AND PHASE SWITCH
SWITCHED-GAIN SUMMING AMPLIFIER AND LIMITER
VERTICAL IDENTIFICATION SAWTOOTH GENERATOR
MODULATOR CONTROL CIRCUIT
PULSE SEPARATOR
CHROMINANCE BLANKING STAGE
CLAMPING AND BLANKING STAGE
INPUT CLAMP AND SEQUENTIAL AMPLIFIER
SECAM LEVEL
PAL LEVEL
PAL BAL
PAL PHASE
COMB BAL
B-Y DEV
R-Y DEV
BELL
AFC
B-LINE
12
13
14
15
16
17
18
19
20
21
22
23

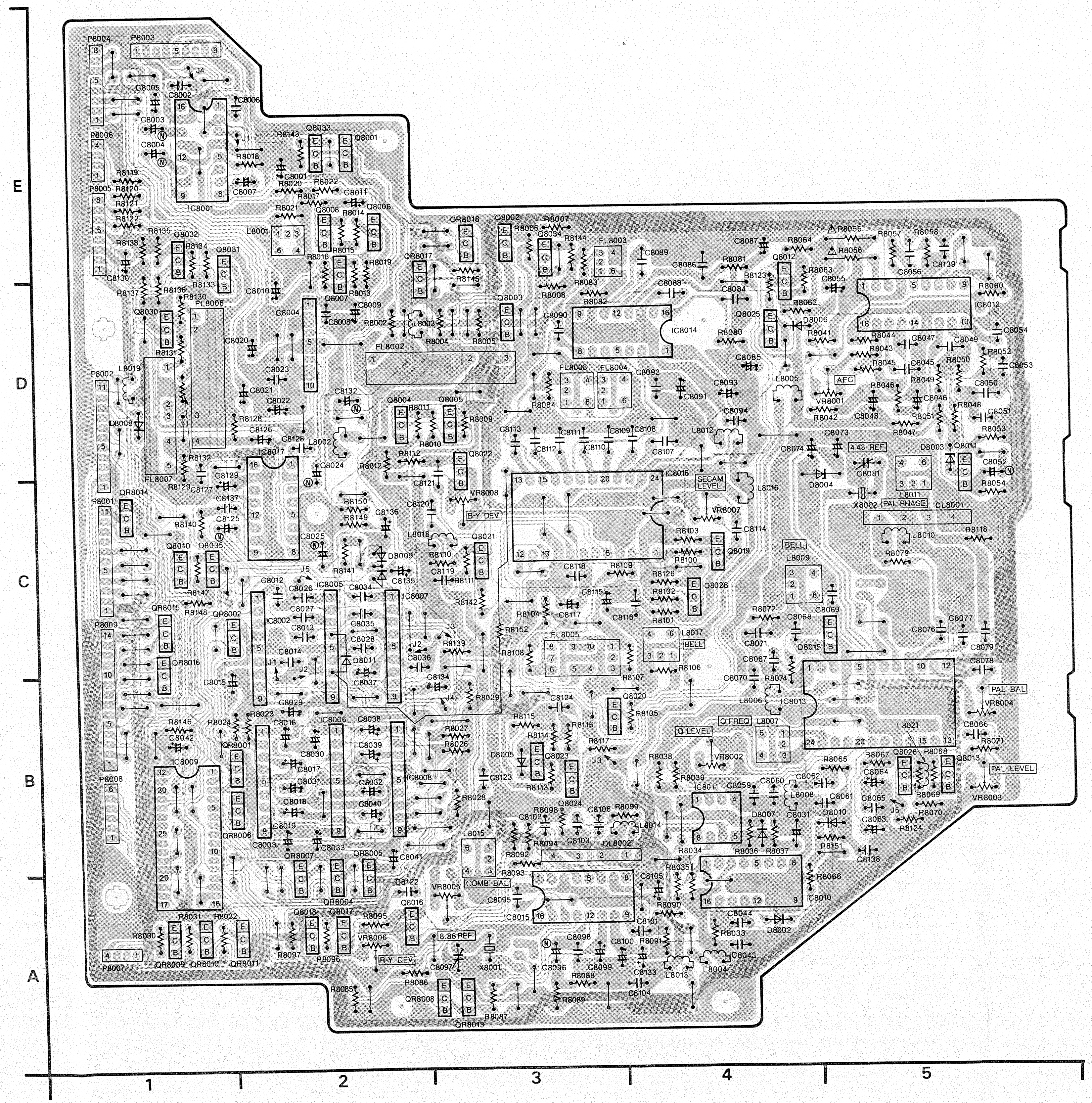
IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

NOTE: WHEN SECAM SIGNAL IS RECORDED WITH S-VHS MODE OR LP MODE, SECAM SIGNAL IS AUTOMATICALLY CONVERTED TO PAL SIGNAL AND IT IS RECORDED.

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS (   ) ON THIS DIAGRAM IS RECORD MODE WITH SECAM COLOUR SIGNAL. (S-VHS: SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH SECAM COLOUR SIGNAL. (S-VHS: SP MODE)

3-24. PAL/SECAM TRANSCODER C.B.A. (VEP03743A)


E
D
C
B
A
1
2
3
4
5
P8004
P8003
P8006
P8005
P8002
P8001
P8008
P8009
P8007
IC8001
IC8004
IC8014
IC8012
IC8017
IC8016
IC8002
IC8005
IC8006
IC8009
IC8003
IC8007
IC8008
IC8011
IC8013
IC8015
IC8010
FL8002
FL8003
FL8004
FL8005
FL8006
FL8007
FL8008
DL8001
DL8002
4.43 REF
AFC
SECAM LEVEL
B-Y DEV
R-Y DEV
PAL PHASE
BELL
Q LEVEL
Q FREQ
PAL BAL
PAL LEVEL
COMB BAL
8.86 REF

PAL/SECAM TRANSCODER C.B.A.

Transistor	
Q8001	E-2
Q8002	E-3
Q8003	D-3
Q8004	D-2
Q8005	D-3
Q8006	E-2
Q8007	D-2
Q8008	E-2
Q8010	C-1
Q8011	D-5
Q8012	E-4
Q8013	B-5
Q8015	C-4
Q8016	A-2
Q8017	A-2
Q8018	A-2
Q8019	C-4
Q8020	B-4
Q8021	C-3
Q8022	D-3
Q8023	B-3
Q8024	B-3
Q8025	D-4
Q8026	B-5
Q8028	C-4
Q8030	D-1
Q8031	E-1
Q8032	E-1
Q8033	E-2
Q8034	E-3
Q8035	C-1

Transistor & Resistor	
QR8001	B-1
QR8002	C-1
QR8004	A-2
QR8005	B-2
QR8006	B-1
QR8007	B-2
QR8008	A-2
QR8009	A-1
QR8010	A-1
QR8011	A-2
QR8013	A-3
QR8014	C-1
QR8015	C-1
QR8016	C-1
QR8017	E-2
QR8018	E-3

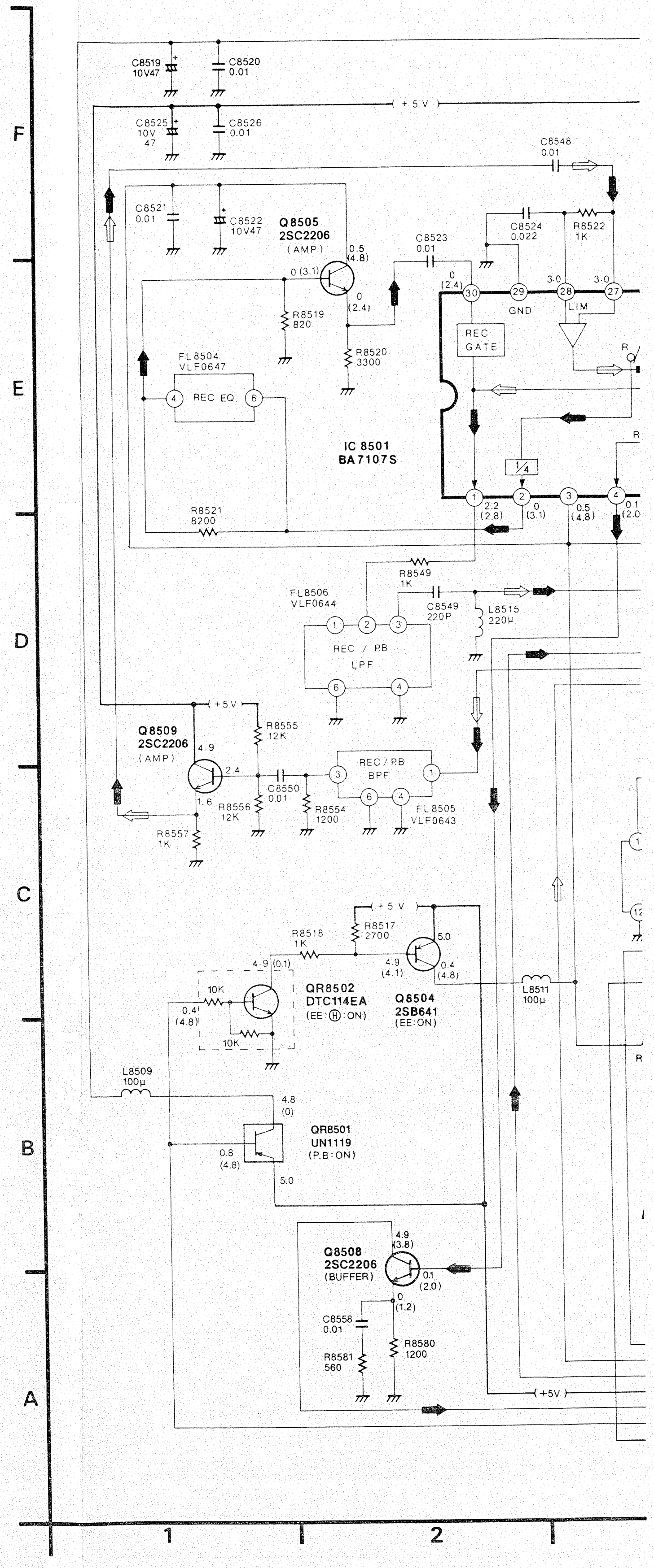
Integrated Circuit	
IC8001	E-1
IC8002	C-2
IC8003	B-2
IC8004	D-2
IC8005	C-2
IC8006	B-2
IC8007	C-2
IC8008	B-2
IC8009	B-1
IC8010	A-4
IC8011	B-4
IC8012	D-5
IC8013	B-5
IC8014	D-4
IC8015	A-3
IC8016	C-4
IC8017	D-2

Adjustment	
C8081	D-5
C8097	A-3
L8001	E-2
L8007	B-4
L8009	C-4
L8011	C-5
L8015	B-3
L8017	C-4
VR8001	D-5
VR8002	B-4
VR8003	B-5
VR8004	B-5
VR8005	A-3
VR8006	A-2
VR8007	C-4
VR8008	C-3

Connector	
P8001	C-1
P8002	D-1
P8003	E-1
P8004	E-1
P8005	E-1
P8006	E-1
P8007	A-1
P8008	B-1
P8009	C-1

ADDRESS INFORMATION

3-25. SECAM CHROMINANCE SCHEMATI


F
E
D
C
B
A
1
2
C8519 10V47
C8520 0.01
+5V
C8525 10V 47
C8526 0.01
C8548 0.01
C8521 0.01
C8522 10V47
Q8505 2SC2206 (AMP)
C8523 0.01
C8524 0.022
R8522 1K
R8519 820
R8520 3300
FL8504 VLF0647
REC EQ
REC GATE
GND
LIM
IC 8501 BA7107S
R8521 8200
R8549 1K
FL8506 VLF0644
C8549 220P
L8515 220μ
REC / PB LPF
Q8509 2SC2206 (AMP)
R8555 12K
REC/PB BPF
C8550 0.01
R8556 12K
R8554 1200
FL8505 VLF0643
R8557 1K
R8518 1K
R8517 2700
QR8502 DTC114EA (EE·Ⓝ·ON)
Q8504 2SB641 (EE·ON)
L8511 100μ
L8509 100μ
QR8501 UN1119 (P.B·ON)
Q8508 2SC2206 (BUFFER)
C8558 0.01
R8580 1200
R8581 560

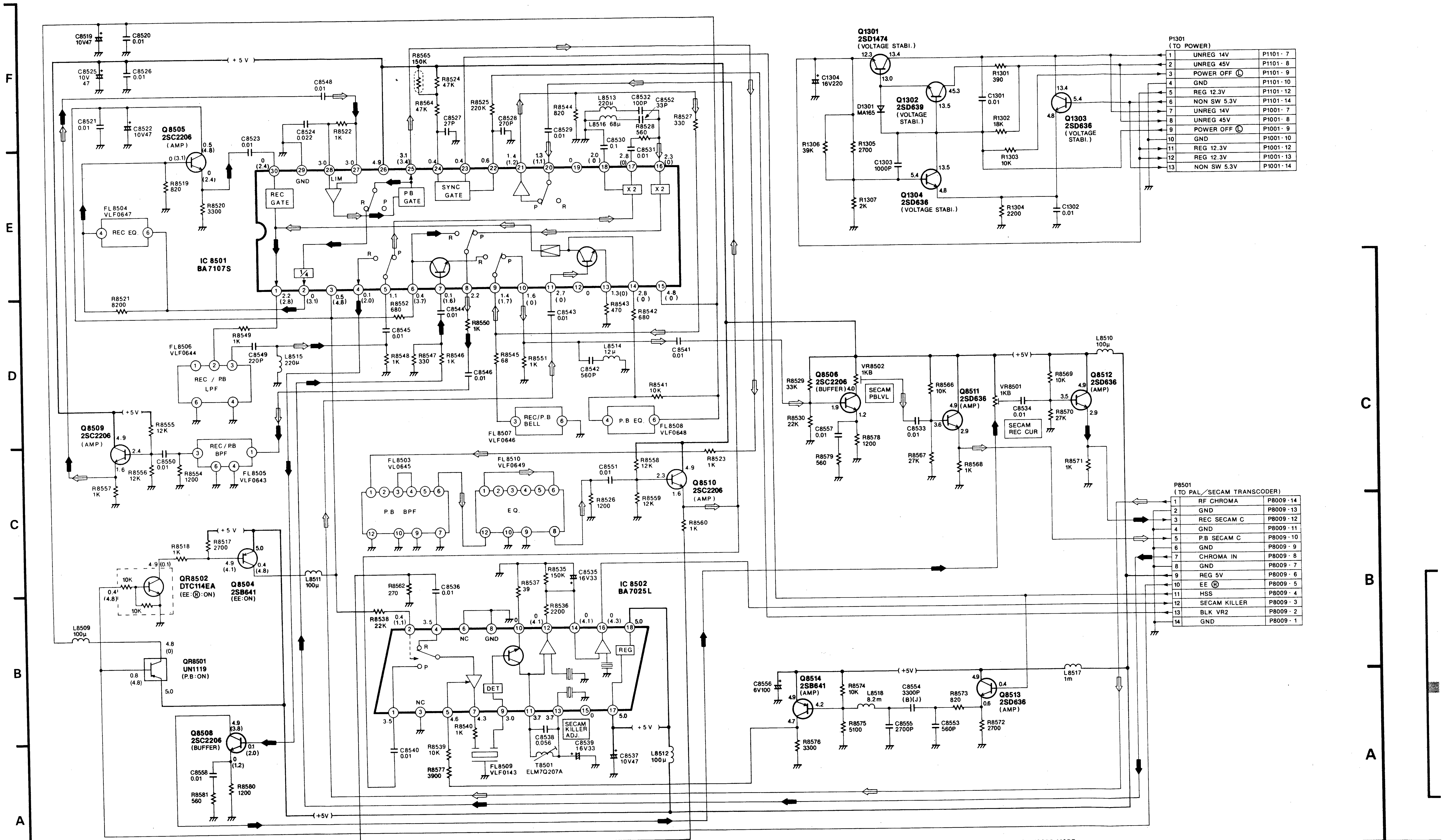
3-25. SECAM CHROMINANCE SCHEMATIC DIAGRAM

⬅ MAIN SIGNAL PATH IN REC MODE (VHS)

⇦ MAIN SIGNAL PATH IN PLAYBACK MODE (VHS)

3-26. SE

CODER C.B.A.	
ntegrated Circuit	
IC8001	E-1
IC8002	C-2
IC8003	B-2
IC8004	D-2
IC8005	C-2
IC8006	B-2
IC8007	C-2
IC8008	B-2
IC8009	B-1
IC8010	A-4
IC8011	B-4
IC8012	D-5
IC8013	B-5
IC8014	D-4
IC8015	A-3
IC8016	C-4
IC8017	D-2
Adjustment	
C8081	D-5
C8097	A-3
L8001	E-2
L8007	B-4
L8009	C-4
L8011	C-5
L8015	B-3
L8017	C-4
VR8001	D-5
VR8002	B-4
VR8003	B-5
VR8004	B-5
VR8005	A-3
VR8006	A-2
VR8007	C-4
VR8008	C-3
Connector	
P8001	C-1
P8002	D-1
P8003	E-1
P8004	E-1
P8005	E-1
P8006	E-1
P8007	A-1
P8008	B-1
P8009	C-1


F
E
D
C
B
A
C
B
A
IC 8501
BA7107S
IC 8502
BA7025L
Q8505
2SC2206
(AMP)
Q8509
2SC2206
(AMP)
Q8504
2SB641
(EE:ON)
QR8502
DTC114EA
(EE:Ⓗ:ON)
QR8501
UN1119
(P.B:ON)
Q8508
2SC2206
(BUFFER)
Q8510
2SC2206
(AMP)
Q8506
2SC2206
(BUFFER)
Q8511
2SD636
(AMP)
Q8512
2SD636
(AMP)
Q8514
2SB641
(AMP)
Q8513
2SD636
(AMP)
Q1301
2SD1474
(VOLTAGE STABI.)
Q1302
2SD639
(VOLTAGE STABI.)
Q1303
2SD636
(VOLTAGE STABI.)
Q1304
2SD636
(VOLTAGE STABI.)
D1301
MA165
FL8504
VLF0647
REC EQ.
FL8506
VLF0644
REC / PB
LPF
FL8505
VLF0643
REC / PB
BPF
FL8507
VLF0646
REC/P.B
BELL
FL8508
VLF0648
P.B EQ.
FL8503
VL0645
P.B BPF
FL8510
VLF0649
EQ.
FL8509
VLF0143
T8501
ELM7Q207A
REC GATE
P B GATE
SYNC GATE
LIM
DET
REG
SECAM KILLER ADJ.
SECAM PBLVL
SECAM REC CUR
VR8502
1KB
VR8501
1KB
GND
NC
+ 5 V
1/4
X 2
X 2

P1301 (TO POWER)		
1	UNREG 14V	P1101 · 7
2	UNREG 45V	P1101 · 8
3	POWER OFF Ⓛ	P1101 · 9
4	GND	P1101 · 10
5	REG 12.3V	P1101 · 12
6	NON SW 5.3V	P1101 · 14
7	UNREG 14V	P1001 · 7
8	UNREG 45V	P1001 · 8
9	POWER OFF Ⓛ	P1001 · 9
10	GND	P1001 · 10
11	REG 12.3V	P1001 · 12
12	REG 12.3V	P1001 · 13
13	NON SW 5.3V	P1001 · 14

P8501 (TO PAL／SECAM TRANSCODER)		
1	RF CHROMA	P8009 · 14
2	GND	P8009 · 13
3	REC SECAM C	P8009 · 12
4	GND	P8009 · 11
5	P.B SECAM C	P8009 · 10
6	GND	P8009 · 9
7	CHROMA IN	P8009 · 8
8	GND	P8009 · 7
9	REG 5V	P8009 · 6
10	EE Ⓗ	P8009 · 5
11	HSS	P8009 · 4
12	SECAM KILLER	P8009 · 3
13	BLK VR2	P8009 · 2
14	GND	P8009 · 1

NOTE: WHEN SECAM SIGNAL IS RECORDED WITH S-VHS MODE OR LP MODE, SECAM SIGNAL IS AUTOMATICALLY CONVERTED TO PAL SIGNAL AND IT IS RECORDED.

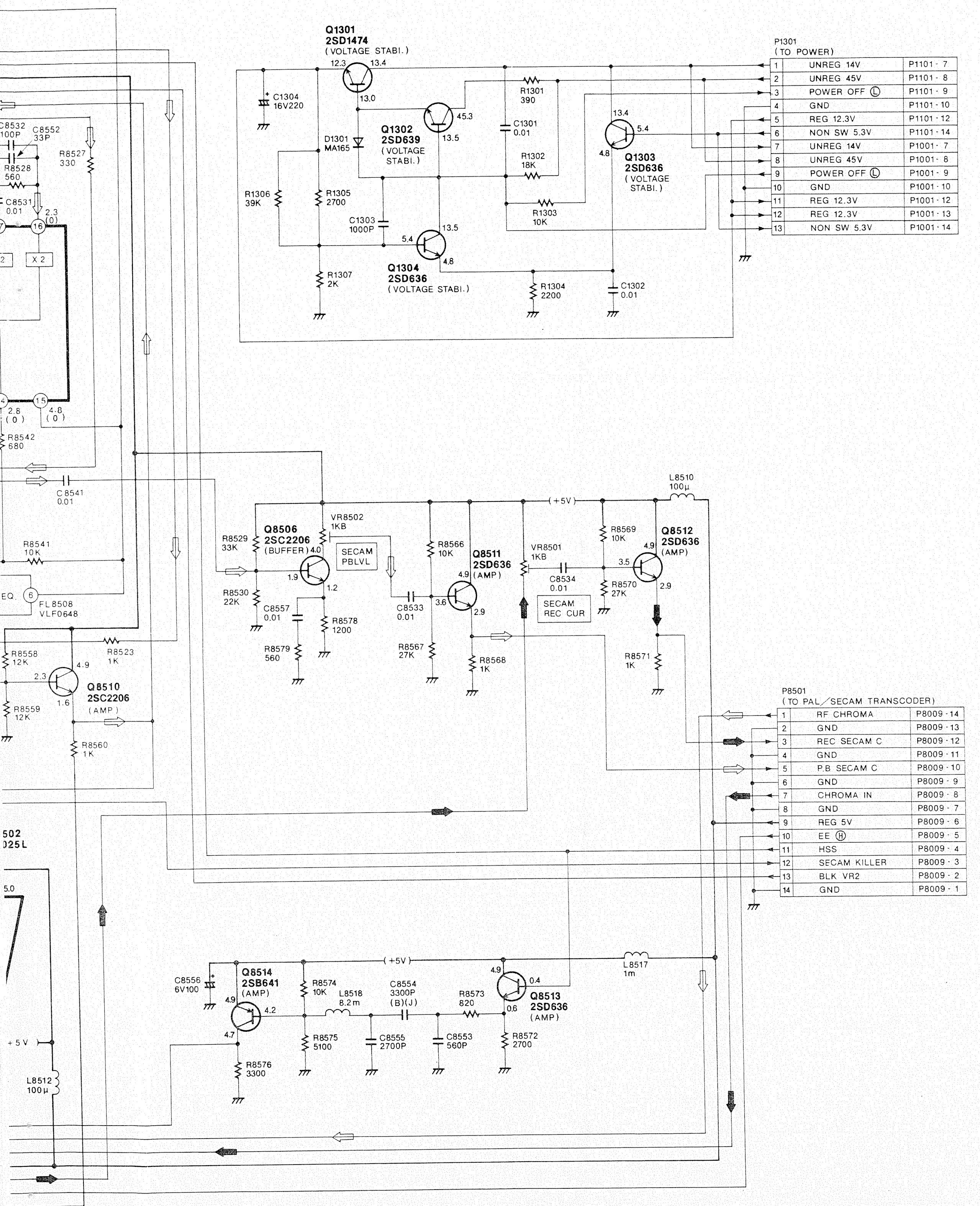
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH SECAM COLOUR SIGNAL. (S-VHS: SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH SECAM COLOUR SIGNAL. (S-VHS: SP MODE)

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

1 2 3 4 5 6 7 8 9

3-26. SECAM CHROMINANCE C.B.A. (VEP03744A)

➡ MAIN SIGNAL PATH IN REC MODE (VHS)
⇦ MAIN SIGNAL PATH IN PLAYBACK MODE (VHS)

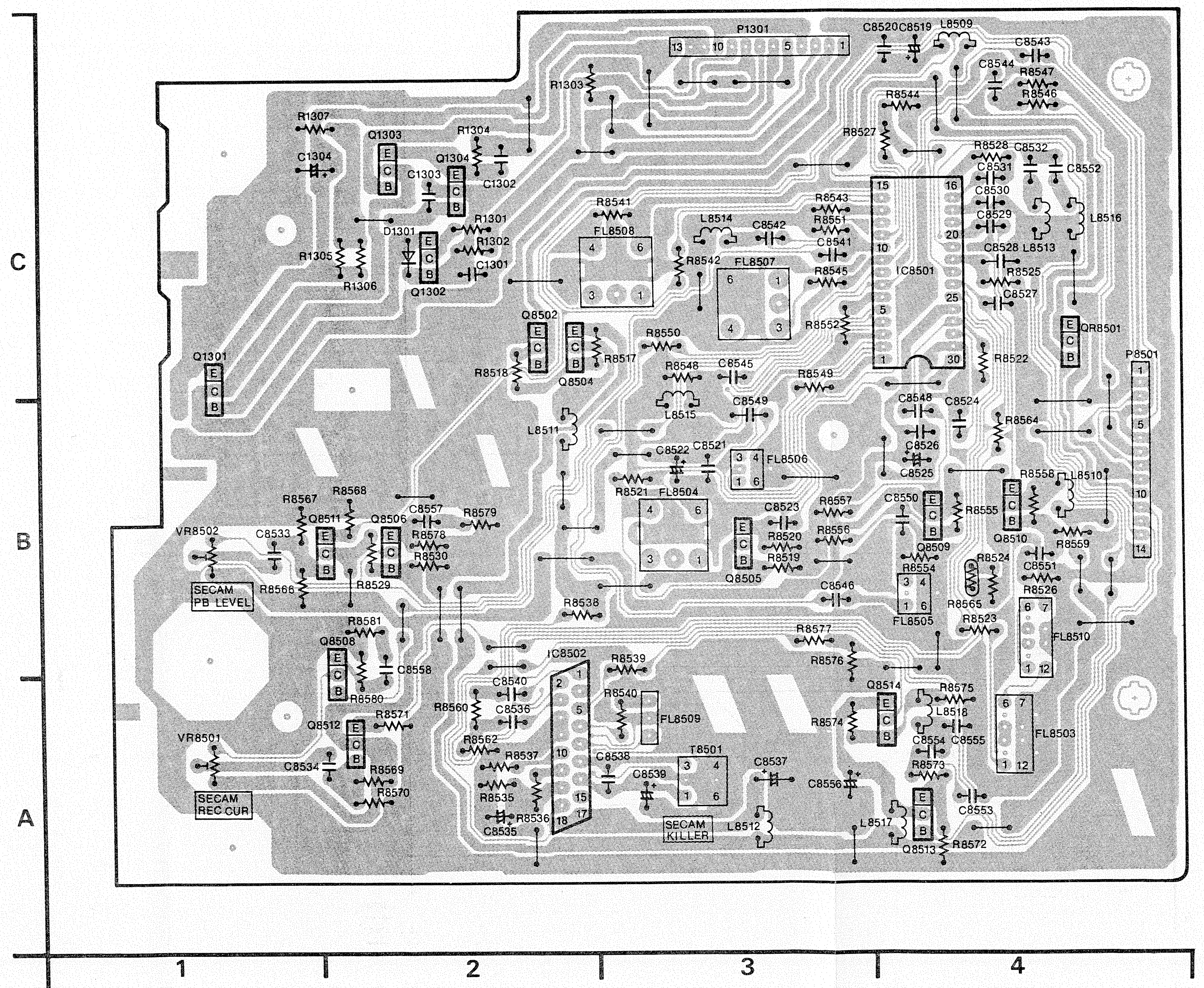

Q1301
2SD1474
(VOLTAGE STABI.)
Q1302
2SD639
(VOLTAGE STABI.)
Q1303
2SD636
(VOLTAGE STABI.)
Q1304
2SD636
(VOLTAGE STABI.)
C1304 16V220
D1301 MA165
R1306 39K
R1305 2700
C1303 1000P
R1307 2K
R1301 390
C1301 0.01
R1302 18K
R1303 10K
R1304 2200
C1302 0.01
P1301
(TO POWER)
1 UNREG 14V P1101 · 7
2 UNREG 45V P1101 · 8
3 POWER OFF Ⓛ P1101 · 9
4 GND P1101 · 10
5 REG 12.3V P1101 · 12
6 NON SW 5.3V P1101 · 14
7 UNREG 14V P1001 · 7
8 UNREG 45V P1001 · 8
9 POWER OFF Ⓛ P1001 · 9
10 GND P1001 · 10
11 REG 12.3V P1001 · 12
12 REG 12.3V P1001 · 13
13 NON SW 5.3V P1001 · 14
C8532 100P
C8552 33P
R8527 330
R8528 560
C8531 0.01
R8542 680
C8541 0.01
R8541 10K
FL8508 VLF0648
R8558 12K
R8523 1K
Q8510
2SC2206
(AMP)
R8559 12K
R8560 1K
Q8506
2SC2206
(BUFFER)
R8529 33K
R8530 22K
VR8502 1KB
SECAM PBLVL
C8557 0.01
R8578 1200
R8579 560
R8566 10K
C8533 0.01
R8567 27K
Q8511
2SD636
(AMP)
R8568 1K
VR8501 1KB
C8534 0.01
SECAM REC CUR
(+5V)
L8510 100µ
R8569 10K
R8570 27K
Q8512
2SD636
(AMP)
R8571 1K
P8501
(TO PAL／SECAM TRANSCODER)
1 RF CHROMA P8009 · 14
2 GND P8009 · 13
3 REC SECAM C P8009 · 12
4 GND P8009 · 11
5 P.B SECAM C P8009 · 10
6 GND P8009 · 9
7 CHROMA IN P8009 · 8
8 GND P8009 · 7
9 REG 5V P8009 · 6
10 EE Ⓗ P8009 · 5
11 HSS P8009 · 4
12 SECAM KILLER P8009 · 3
13 BLK VR2 P8009 · 2
14 GND P8009 · 1
C8556 6V100
Q8514
2SB641
(AMP)
R8574 10K
L8518 8.2m
C8554 3300P (B)(J)
R8573 820
Q8513
2SD636
(AMP)
L8517 1m
R8575 5100
C8555 2700P
C8553 560P
R8572 2700
R8576 3300
+5V
L8512 100µ
5
6
7
8
9

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH SECAM COLOUR SIGNAL. (S-VHS : SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH SECAM COLOUR SIGNAL. (S-VHS : SP MODE)

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

SECAM CHROMINANCE C.B.A.			
Transistor		**Transistor & Resistor**	
Q1301	C-1	QR8501	C-4
Q1302	C-2	**Integrated Circuit**	
Q1303	C-2	IC8501	C-4
Q1304	C-2	IC8502	A-2
Q8502	C-2	**Adjustment**	
Q8504	C-2	T8501	A-3
Q8505	B-3	VR8501	A-1
Q8506	B-2	VR8502	B-1
Q8508	B-2	**Connector**	
Q8509	B-4	P1301	C-3
Q8510	B-4	P8501	B-4
Q8511	B-2		
Q8512	A-2		
Q8513	A-4		
Q8514	A-4		

ADDRESS INFORMATION


P1301
13
10
5
1
C8520
C8519
L8509
C8543
C8544
R8547
R8546
R8544
R1303
R1307
C1304
Q1303
Q1304
R1304
C1303
C1302
R1301
R1302
C1301
D1301
Q1302
R1305
R1306
Q1301
R8541
FL8508
L8514
C8542
R8543
R8551
C8541
R8542
FL8507
R8545
IC8501
15
16
20
25
10
5
1
30
R8527
R8528
C8532
C8531
C8530
C8552
C8529
L8516
C8528
L8513
R8525
C8527
QR8501
R8522
P8501
Q8502
Q8504
R8518
R8517
R8550
R8548
C8545
R8549
R8552
L8515
C8549
L8511
C8548
C8524
C8526
C8525
R8564
C8522
C8521
FL8506
R8521
FL8504
R8558
L8510
R8567
R8568
Q8511
Q8506
C8557
R8579
R8578
R8530
C8533
VR8502
SECAM PB LEVEL
R8566
R8529
C8523
R8520
R8519
R8557
R8556
Q8505
C8550
Q8509
R8555
Q8510
R8559
R8554
R8524
C8551
R8526
R8565
FL8505
R8523
FL8510
C8546
R8538
R8577
R8576
R8581
Q8508
C8558
R8580
IC8502
R8539
R8540
FL8509
C8540
C8536
R8560
R8571
Q8512
VR8501
C8534
R8569
R8570
SECAM REC CUR
R8562
R8537
R8535
R8536
C8535
C8538
C8539
T8501
C8537
C8556
SECAM KILLER
L8512
L8517
Q8513
R8572
Q8514
R8575
L8518
C8554
C8555
R8573
R8574
C8553
FL8503
C
B
A
1
2
3
4

Next Page:
INPUT/OUTPUT PACK Section

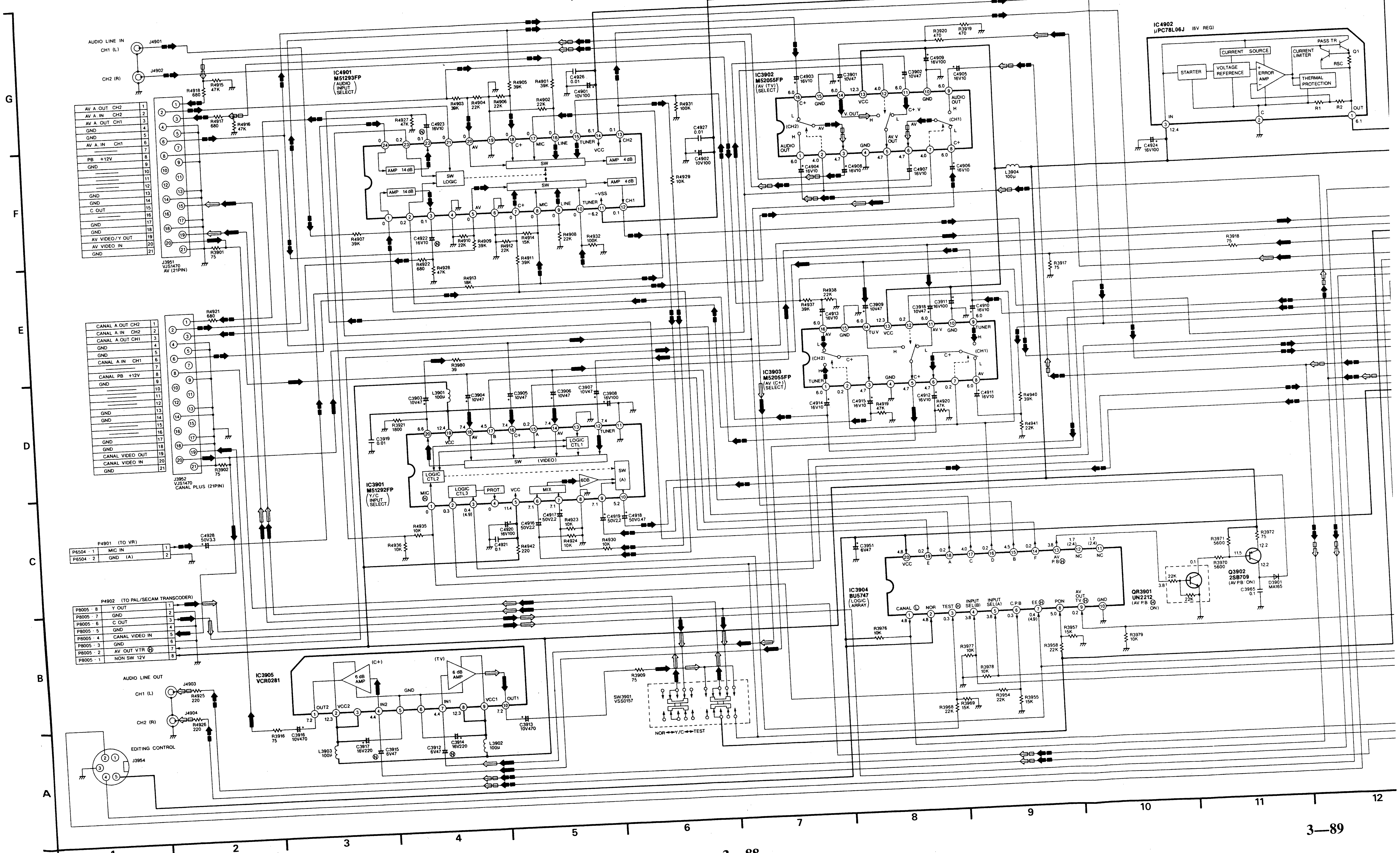
3-27. INPUT/OUTPUT PACK SCHEMATIC DIAGRAM

VIDEO MAIN SIGNAL PATH IN REC MODE

VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE

AUDIO MAIN SIGNAL PATH IN REC MODE

AUDIO MAIN SIGNAL PATH IN PLAYBACK MO

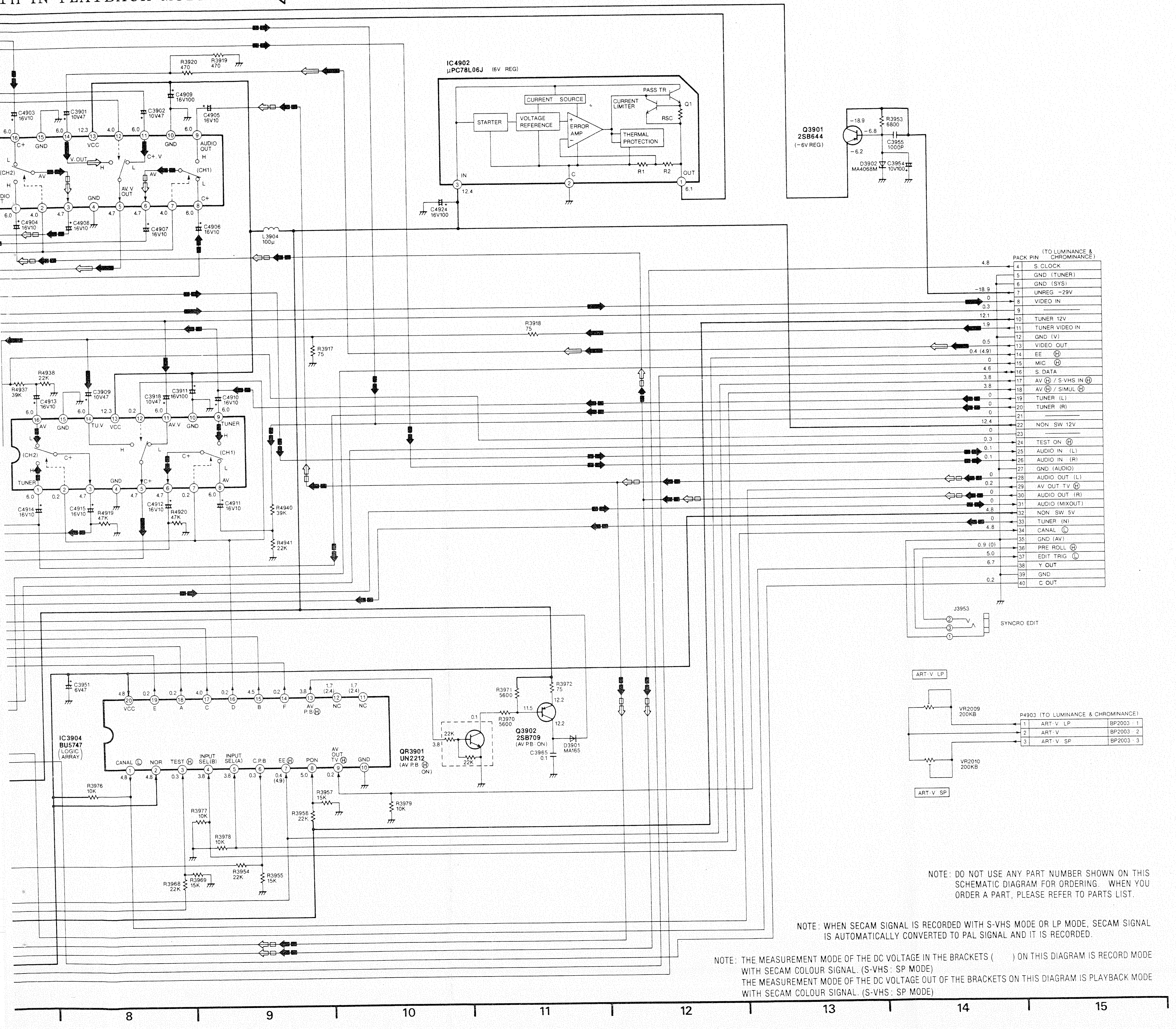


AUDIO LINE IN
CH1 (L)
CH2 (R)
J4901
J4902
IC4901
M51293FP
(AUDIO INPUT SELECT)
IC3902
M52055FP
(AV (TV) SELECT)
IC4902
μPC78L06J (6V REG)
CURRENT SOURCE
CURRENT LIMITER
PASS TR
STARTER
VOLTAGE REFERENCE
ERROR AMP
THERMAL PROTECTION
IN
OUT
J3951
VJS1470
AV (21PIN)
AV A OUT CH2
AV A IN CH2
AV A OUT CH1
GND
AV A IN CH1
PB +12V
C OUT
AV VIDEO/Y OUT
AV VIDEO IN
IC3903
M52055FP
(AV (C+) SELECT)
J3952
VJS1470
CANAL PLUS (21PIN)
CANAL A.OUT CH2
CANAL A.IN CH2
CANAL A.OUT CH1
CANAL A.IN CH1
CANAL PB +12V
CANAL VIDEO OUT
CANAL VIDEO IN
IC3901
M51292FP
(Y/C INPUT SELECT)
LOGIC CTL1
LOGIC CTL2
LOGIC CTL3
PROT
MIX
6DB
SW (VIDEO)
P4901 (TO VR)
P6504 - 1 MIC IN
P6504 - 2 GND (A)
P4902 (TO PAL/SECAM TRANSCODER)
P8005 - 8 Y OUT
P8005 - 7 GND
P8005 - 6 C OUT
P8005 - 5 GND
P8005 - 4 CANAL VIDEO IN
P8005 - 3 GND
P8005 - 2 AV OUT VTR Ⓗ
P8005 - 1 NON SW 12V
IC3904
BU5747
(LOGIC ARRAY)
CANAL Ⓛ
NOR
TEST Ⓛ
INPUT SEL(B)
INPUT SEL(A)
C.PB
EE Ⓗ
PON
AV OUT TV Ⓗ
QR3901
UN2212
(AV P.B Ⓗ ON)
Q3902
2SB709
(AV P.B ON)
D3901
MA165
AUDIO LINE OUT
CH1 (L)
CH2 (R)
J4903
J4904
EDITING CONTROL
J3954
IC3905
VCR0281
6 dB AMP
(C+)
(TV)
OUT1
OUT2
VCC1
VCC2
IN1
IN2
GND
SW3901
VSS0157
NOR◄►Y/C◄►TEST
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12

TH IN REC MODE
TH IN PLAYBACK MODE

AUDIO MAIN SIGNAL PATH IN REC MODE
AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE

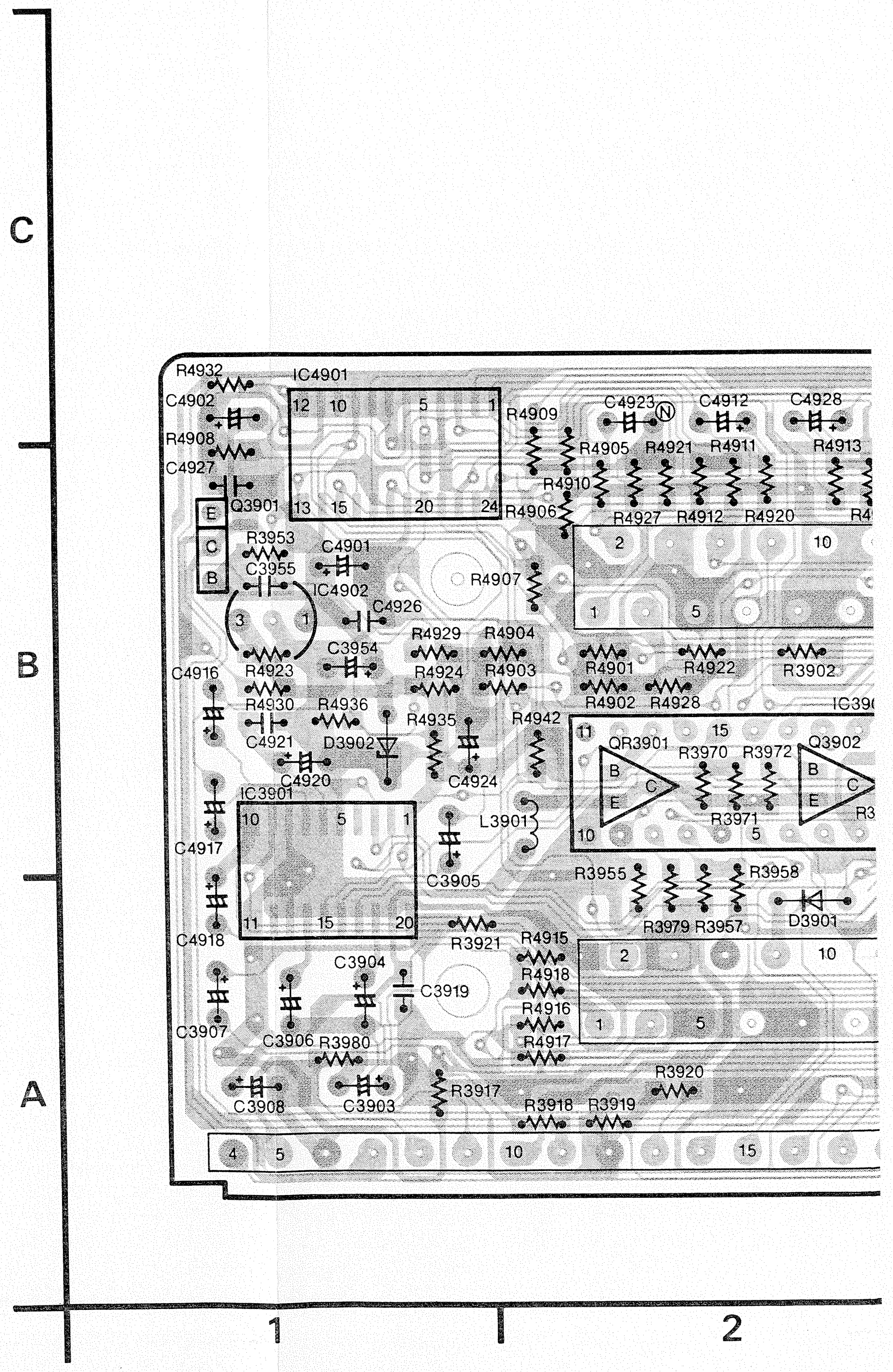
3-28. INPUT/OUTPUT PACK C.B.A. (VEP03642A)


IC4902
μPC78L06J (6V REG)
CURRENT SOURCE
CURRENT LIMITER
PASS TR
STARTER
VOLTAGE REFERENCE
ERROR AMP
THERMAL PROTECTION
RSC
Q1
R1
R2
IN
C
OUT
C4924 16V100
Q3901 2SB644 (−6V REG)
D3902 MA4068M
R3953 6800
C3955 1000P
C3954 10V100
L3904 100μ
R3917 75
R3918 75
R3920 470
R3919 470
C4909 16V100
C4903 16V10
C3901 10V47
C3902 10V47
C4905 16V10
C4904 16V10
C4908 16V10
C4907 16V10
C4906 16V10
R4938 22K
R4937 39K
C4913 16V10
C3909 10V47
C3918 10V47
C3911 16V100
C4910 16V10
C4914 16V10
C4915 16V10
R4919 47K
C4912 16V10
R4920 47K
C4911 16V10
R4940 39K
R4941 22K
C3951 6V47
IC3904
BU5747
(LOGIC ARRAY)
VCC
E
A
C
D
B
F
AV P.B Ⓗ
NC
CANAL Ⓛ
NOR
TEST Ⓗ
INPUT SEL(B)
INPUT SEL(A)
C.P.B
EE Ⓗ
PON
AV OUT TV Ⓗ
GND
R3976 10K
R3977 10K
R3978 10K
R3968 22K
R3969 15K
R3954 22K
R3955 15K
R3957 15K
R3958 22K
R3979 10K
QR3901 UN2212 (AV P.B Ⓗ ON)
R3971 5600
R3970 5600
R3972 75
Q3902 2SB709 (AV P.B ON)
C3965 0.1
D3901 MA165
PACK PIN (TO LUMINANCE & CHROMINANCE)
4 S.CLOCK
5 GND (TUNER)
6 GND (SYS)
7 UNREG −29V
8 VIDEO IN
9 ———
10 TUNER 12V
11 TUNER VIDEO IN
12 GND (V)
13 VIDEO OUT
14 EE Ⓗ
15 MIC Ⓗ
16 S.DATA
17 AV Ⓗ / S-VHS IN Ⓗ
18 AV Ⓗ / SIMUL Ⓗ
19 TUNER (L)
20 TUNER (R)
21 ———
22 NON SW 12V
23 ———
24 TEST ON Ⓗ
25 AUDIO IN (L)
26 AUDIO IN (R)
27 GND (AUDIO)
28 AUDIO OUT (L)
29 AV OUT TV Ⓗ
30 AUDIO OUT (R)
31 AUDIO (MIXOUT)
32 NON SW 5V
33 TUNER (N)
34 CANAL Ⓛ
35 GND (AV)
36 PRE ROLL Ⓗ
37 EDIT TRIG Ⓛ
38 Y OUT
39 GND
40 C OUT
J3953
SYNCRO EDIT
ART-V LP
ART-V SP
VR2009 200KB
VR2010 200KB
P4903 (TO LUMINANCE & CHROMINANCE)
1 ART-V LP BP2003-1
2 ART-V BP2003-2
3 ART-V SP BP2003-3
8
9
10
11
12
13
14
15

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

NOTE: WHEN SECAM SIGNAL IS RECORDED WITH S-VHS MODE OR LP MODE, SECAM SIGNAL IS AUTOMATICALLY CONVERTED TO PAL SIGNAL AND IT IS RECORDED.

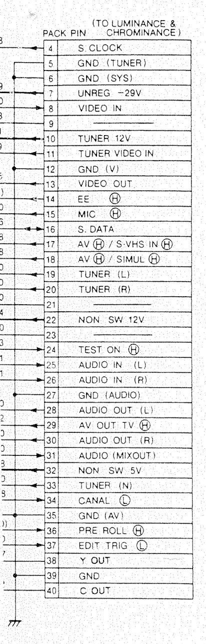
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS (   ) ON THIS DIAGRAM IS RECORD MODE WITH SECAM COLOUR SIGNAL. (S-VHS: SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH SECAM COLOUR SIGNAL. (S-VHS: SP MODE)


C
B
A
1
2
IC4901
IC3901
Q3901
QR3901
Q3902
L3901
D3901
D3902
R4932
C4902
R4908
C4927
R4909
C4923
C4912
C4928
R4905
R4921
R4911
R4913
R4910
R4906
R4927
R4912
R4920
R3953
C3955
C4901
IC4902
R4907
C4926
R4929
R4904
C3954
R4924
R4903
R4901
R4922
R3902
C4916
R4923
R4930
R4936
R4902
R4928
C4921
R4935
R4942
R3970
R3972
C4920
C4924
R3971
C4917
C3905
R3955
R3958
C4918
R3921
R4915
R3979
R3957
C3904
R4918
C3919
R4916
C3907
C3906
R3980
R4917
R3920
C3908
C3903
R3917
R3918
R3919

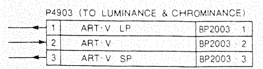
3-28. INPUT/OUTPUT PACK C.B.A. (VEP03642A)

INPUT/OUTPUT PACK C.B.A.			
Transistor		IC3905	C-5
Q3901	B-1	IC4901	C-1
Q3902	B-2	IC4902	B-1
Transistor & Resistor		**Adjustment**	
QR3901	B-2	VR2009	C-5
		VR2010	C-4
Integrated Circuit		**Connector**	
IC3901	B-1	P4901	C-5
IC3902	B-5	P4902	B-5
IC3903	B-5	P4903	C-5
IC3904	B-2		

ADDRESS INFORMATION


(TO LUMINANCE & CHROMINANCE)
PACK PIN
4 S. CLOCK
5 GND (TUNER)
6 GND (SYS)
7 UNREG -29V
8 VIDEO IN
9
10 TUNER 12V
11 TUNER VIDEO IN
12 GND (V)
13 VIDEO OUT
14 EE Ⓗ
15 MIC Ⓗ
16 S. DATA
17 AV Ⓗ / S-VHS IN Ⓗ
18 AV Ⓗ / SIMUL Ⓗ
19 TUNER (L)
20 TUNER (R)
21
22 NON SW 12V
23
24 TEST ON Ⓗ
25 AUDIO IN (L)
26 AUDIO IN (R)
27 GND (AUDIO)
28 AUDIO OUT (L)
29 AV OUT TV Ⓗ
30 AUDIO OUT (R)
31 AUDIO (MIXOUT)
32 NON SW 5V
33 TUNER (N)
34 CANAL Ⓛ
35 GND (AV)
36 PRE ROLL Ⓗ
37 EDIT TRIG Ⓛ
38 Y OUT
39 GND
40 C OUT

SYNCRO EDIT

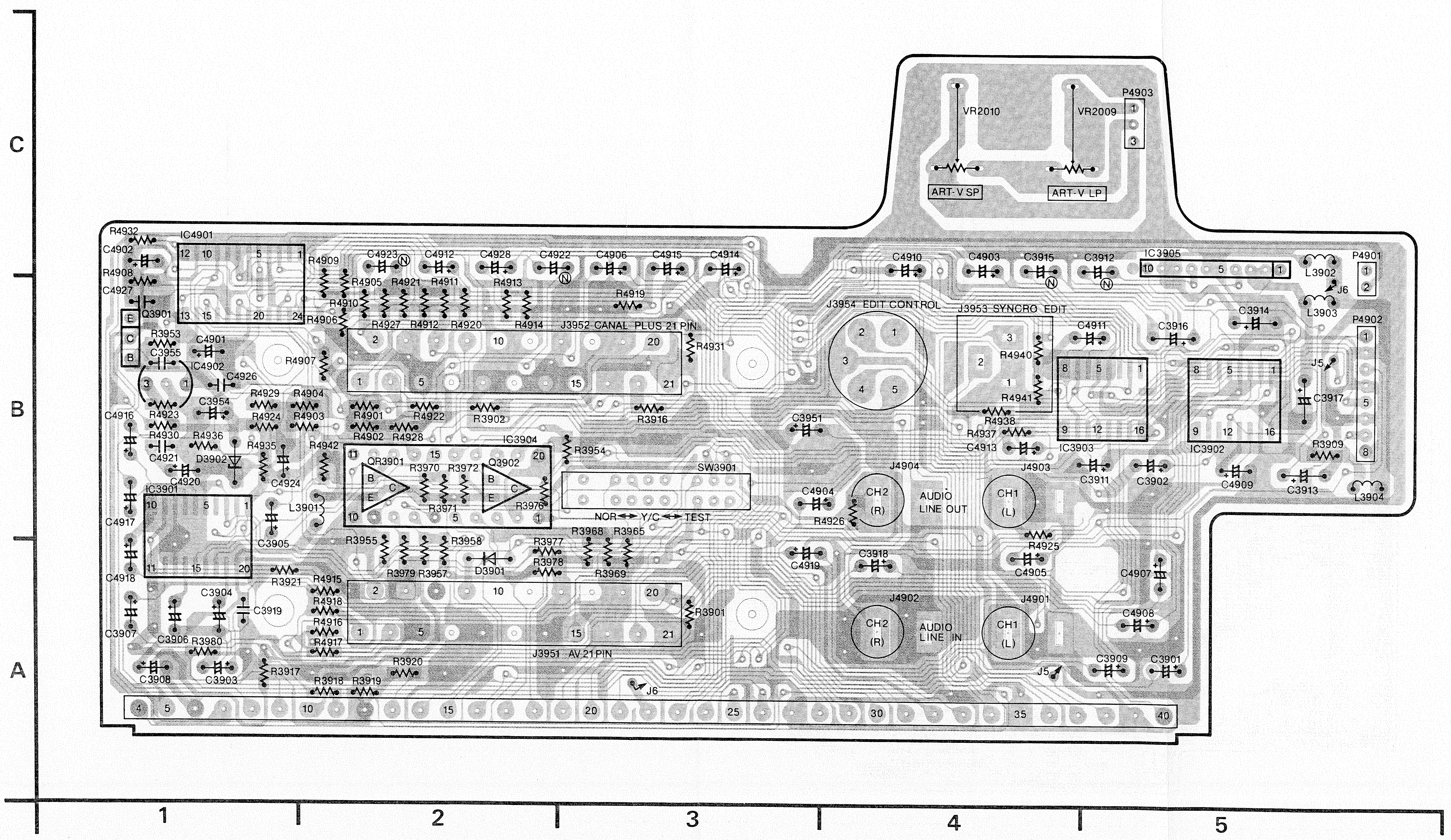

P4903 (TO LUMINANCE & CHROMINANCE)
1 ART-V LP BP2003 1
2 ART-V BP2003 2
3 ART-V SP BP2003 3

ANY PART NUMBER SHOWN ON THIS
DIAGRAM FOR ORDERING. WHEN YOU
₹T, PLEASE REFER TO PARTS LIST.

IS MODE OR LP MODE, SECAM SIGNAL
_ AND IT IS RECORDED.

) ON THIS DIAGRAM IS RECORD MODE

ON THIS DIAGRAM IS PLAYBACK MODE


C
B
A
1
2
3
4
5
15
P4903
VR2010
VR2009
ART-V SP
ART-V LP
R4932
IC4901
C4902
R4908
C4927
Q3901
E
C
B
R3953
C3955
C4901
IC4902
C4926
R4907
R4909
C4923
C4912
C4928
C4922
C4906
C4915
C4914
R4905
R4921
R4911
R4913
R4910
R4906
R4927
R4912
R4920
R4914
R4919
J3952 CANAL PLUS 21 PIN
R4931
C3954
R4929
R4904
R4924
R4903
R4901
R4922
R3902
R3916
R4902
R4928
C4916
R4923
R4930
R4936
R4935
R4942
IC3904
R3954
C4921
D3902
C4920
C4924
QR3901
R3970
R3972
Q3902
R3971
R3976
SW3901
NOR Y/C TEST
IC3901
L3901
C4917
C3905
C4918
R3955
R3958
R3977
R3978
R3968
R3965
R3969
R3979
R3957
D3901
R3921
R4915
R4918
R4916
R4917
C3904
C3919
C3907
C3906
R3980
R3901
J3951 AV 21 PIN
C3908
C3903
R3917
R3918
R3919
R3920
J6
J3954 EDIT CONTROL
J3953 SYNCRO EDIT
C4910
C4903
C3915
C3912
IC3905
P4901
L3902
L3903
C3914
P4902
C4911
C3916
R4940
R4941
R4938
R4937
C4913
IC3903
IC3902
J5
C3917
R3909
C3951
J4904
J4903
C3911
C3902
C4909
C3913
L3904
C4904
CH2 (R)
AUDIO LINE OUT
CH1 (L)
R4926
R4925
C4905
C4919
C3918
C4907
J4902
J4901
C4908
AUDIO LINE IN
C3909
C3901
4
5
10
15
20
25
30
35
40

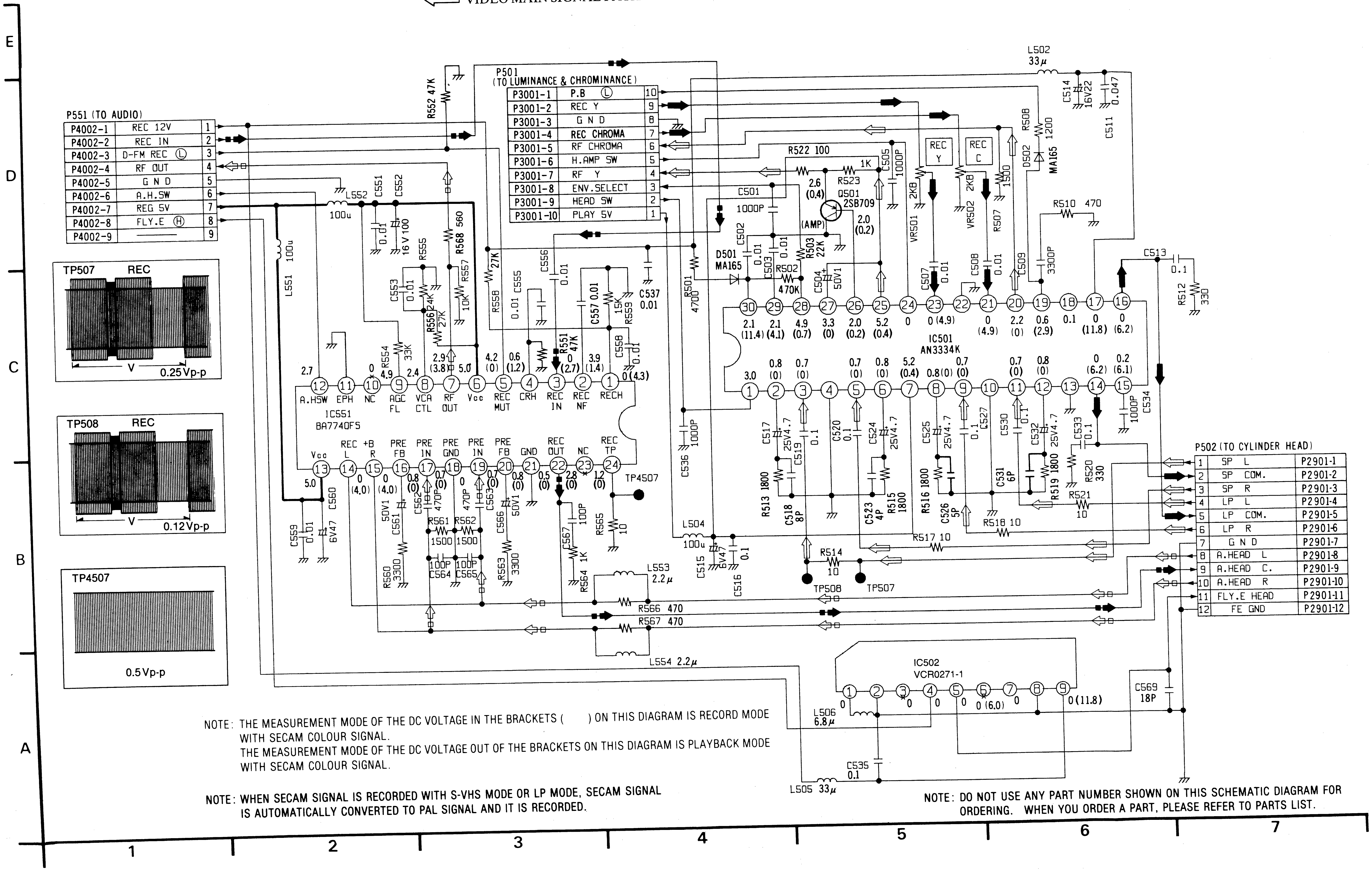
3-29. HEAD AMP SCHEMATIC DIAGRAM

VIDEO MAIN SIGNAL PATH IN REC MODE

VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE

Hi-Fi AUDIO MAIN SIGNAL PATH IN REC MODE

Hi-Fi AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE

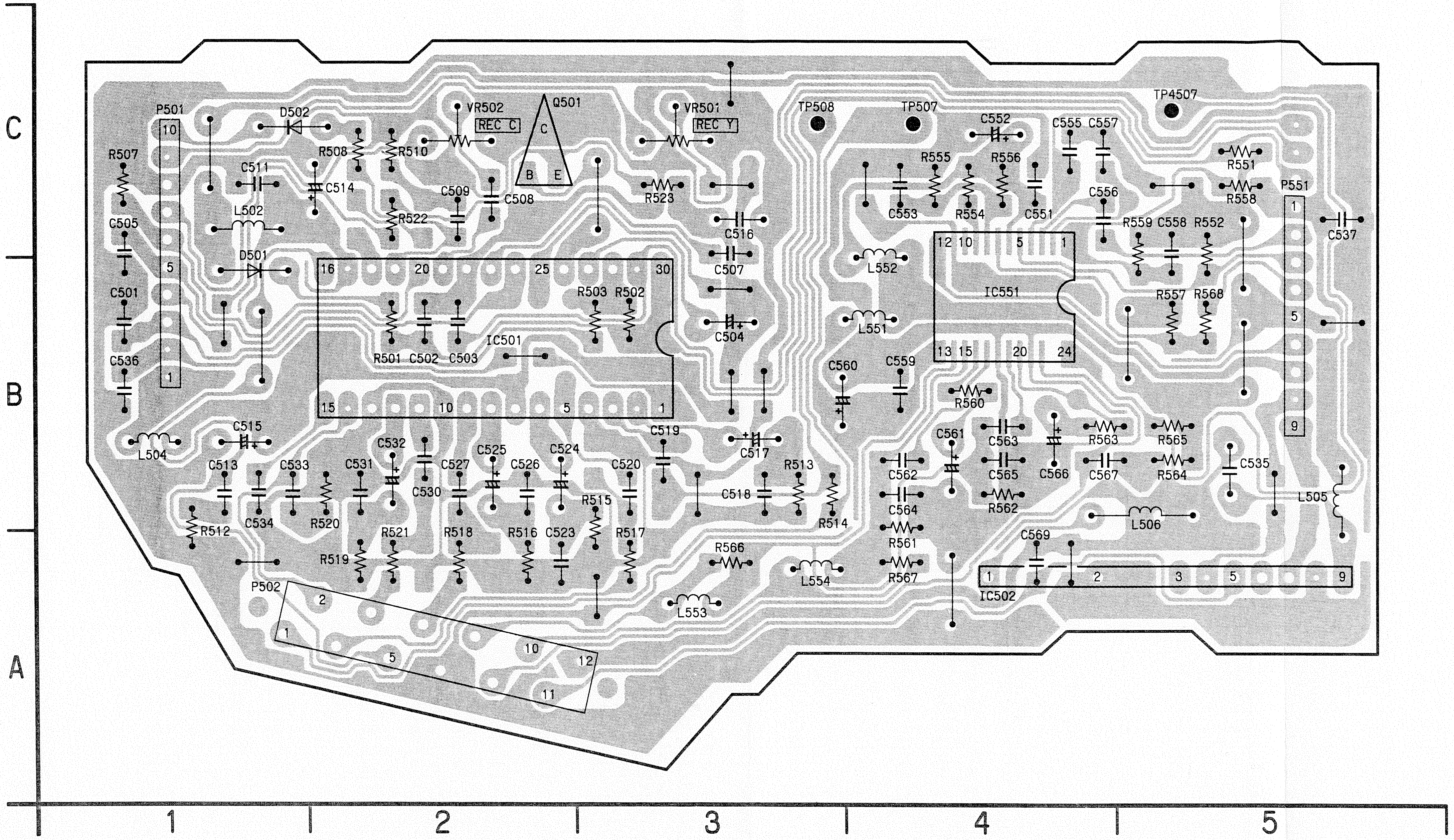

E
D
C
B
A
1
2
3
4
5
6
7
P551 (TO AUDIO)
P4002-1 REC 12V 1
P4002-2 REC IN 2
P4002-3 D-FM REC Ⓛ 3
P4002-4 RF OUT 4
P4002-5 GND 5
P4002-6 A.H.SW 6
P4002-7 REG 5V 7
P4002-8 FLY.E Ⓗ 8
P4002-9 9
P501 (TO LUMINANCE & CHROMINANCE)
P3001-1 P.B Ⓛ 10
P3001-2 REC Y 9
P3001-3 GND 8
P3001-4 REC CHROMA 7
P3001-5 RF CHROMA 6
P3001-6 H.AMP SW 5
P3001-7 RF Y 4
P3001-8 ENV.SELECT 3
P3001-9 HEAD SW 2
P3001-10 PLAY 5V 1
TP507 REC
V 0.25Vp-p
TP508 REC
V 0.12Vp-p
TP4507
0.5Vp-p
IC551 BA7740FS
A.HSW EPH NC AGC FL VCA CTL RF OUT Vcc REC MUT CRH REC IN REC NF RECH
Vcc REC L +B R PRE FB PRE IN PRE GND PRE IN PRE FB GND REC OUT NC REC TP
IC501 AN3334K
(AMP) Q501 2SB709
D501 MA165
D502 MA165
REC Y
REC C
VR501 2K8
VR502 2K8
L502 33μ
L551 100u
L552 100u
L553 2.2μ
L554 2.2μ
L504 100u
L505 33μ
L506 6.8μ
R552 47K
R522 100
R523 1K
R510 470
R508 1200
R512 330
R566 470
R567 470
R514 10
R517 10
R518 10
R521 10
C569 18P
C535 0.1
C513 0.1
TP508
TP507
TP4507
P502 (TO CYLINDER HEAD)
1 SP L P2901-1
2 SP COM. P2901-2
3 SP R P2901-3
4 LP L P2901-4
5 LP COM. P2901-5
6 LP R P2901-6
7 GND P2901-7
8 A.HEAD L P2901-8
9 A.HEAD C. P2901-9
10 A.HEAD R P2901-10
11 FLY.E HEAD P2901-11
12 FE GND P2901-12
IC502 VCR0271-1

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH SECAM COLOUR SIGNAL.
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH SECAM COLOUR SIGNAL.

NOTE: WHEN SECAM SIGNAL IS RECORDED WITH S-VHS MODE OR LP MODE, SECAM SIGNAL IS AUTOMATICALLY CONVERTED TO PAL SIGNAL AND IT IS RECORDED.

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

3-30. HEAD AMP C.B.A. (VEP05149A)

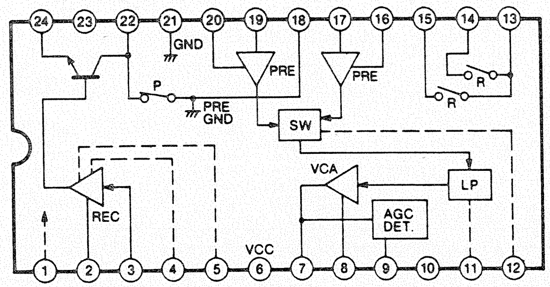

C
B
A
1
2
3
4
5
P501
10
5
1
D502
D501
R507
C505
C501
C536
C511
C514
L502
R508
R510
VR502
REC C
Q501
C
B
E
C509
C508
R522
16
20
25
30
15
10
5
1
R503
R502
R501
C502
C503
IC501
VR501
REC Y
R523
C516
C507
C504
TP508
TP507
C552
R555
R556
C553
R554
C551
C555
C557
C556
TP4507
R551
R558
P551
C537
12
10
5
1
IC551
13
15
20
24
L552
L551
R559
C558
R552
R557
R568
9
L504
C515
C513
C533
C534
R512
C532
C531
C530
C527
C525
C526
C524
R520
R521
R518
R516
C523
R517
R519
R515
C520
C519
C517
R513
C518
R514
R566
L553
L554
C560
C559
R560
C561
C563
C565
C566
R563
R565
C567
R564
C535
L505
C562
C564
R561
R567
R562
L506
C569
IC502
P502
2
1
5
10
12
11

AD)
P2901-1
P2901-2
P2901-3
P2901-4
P2901-5
P2901-6
P2901-7
P2901-8
P2901-9
P2901-10
P2901-11
P2901-12

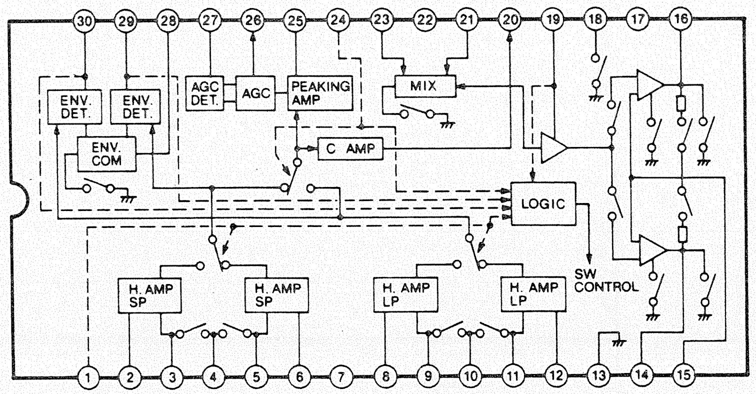
AM FOR
T.

IC BLOCK

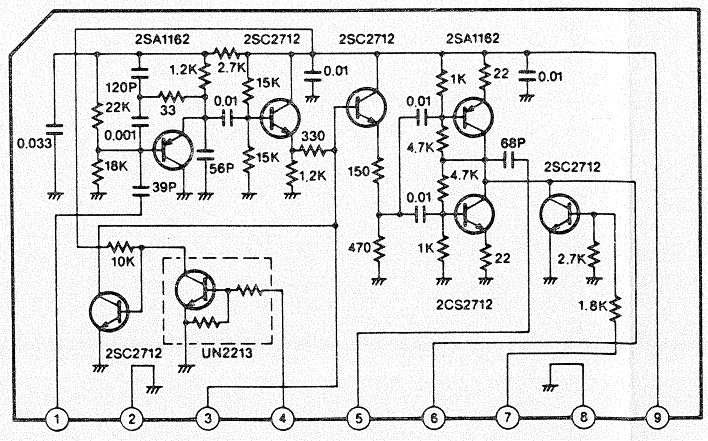
IC551 (BA7740FS)


24
23
22
21
20
19
18
17
16
15
14
13
GND
PRE
PRE
P
R
R
PRE GND
SW
VCA
LP
REC
AGC DET.
VCC
1
2
3
4
5
6
7
8
9
10
11
12

IC501 (AN3334K)


30
29
28
27
26
25
24
23
22
21
20
19
18
17
16
ENV. DET.
ENV. DET.
AGC DET.
AGC
PEAKING AMP
MIX
C AMP
ENV. COM
LOGIC
H. AMP SP
H. AMP SP
H. AMP LP
H. AMP LP
SW CONTROL
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

IC502 (VCR0271)


2SA1162
2SC2712
2SC2712
2SA1162
120P
1.2K
2.7K
15K
0.01
22K
33
0.01
0.001
0.033
18K
39P
56P
15K
330
1.2K
1K
22
0.01
0.01
4.7K
68P
4.7K
2SC2712
150
0.01
470
1K
22
2.7K
2CS2712
1.8K
10K
2SC2712
UN2213
1
2
3
4
5
6
7
8
9

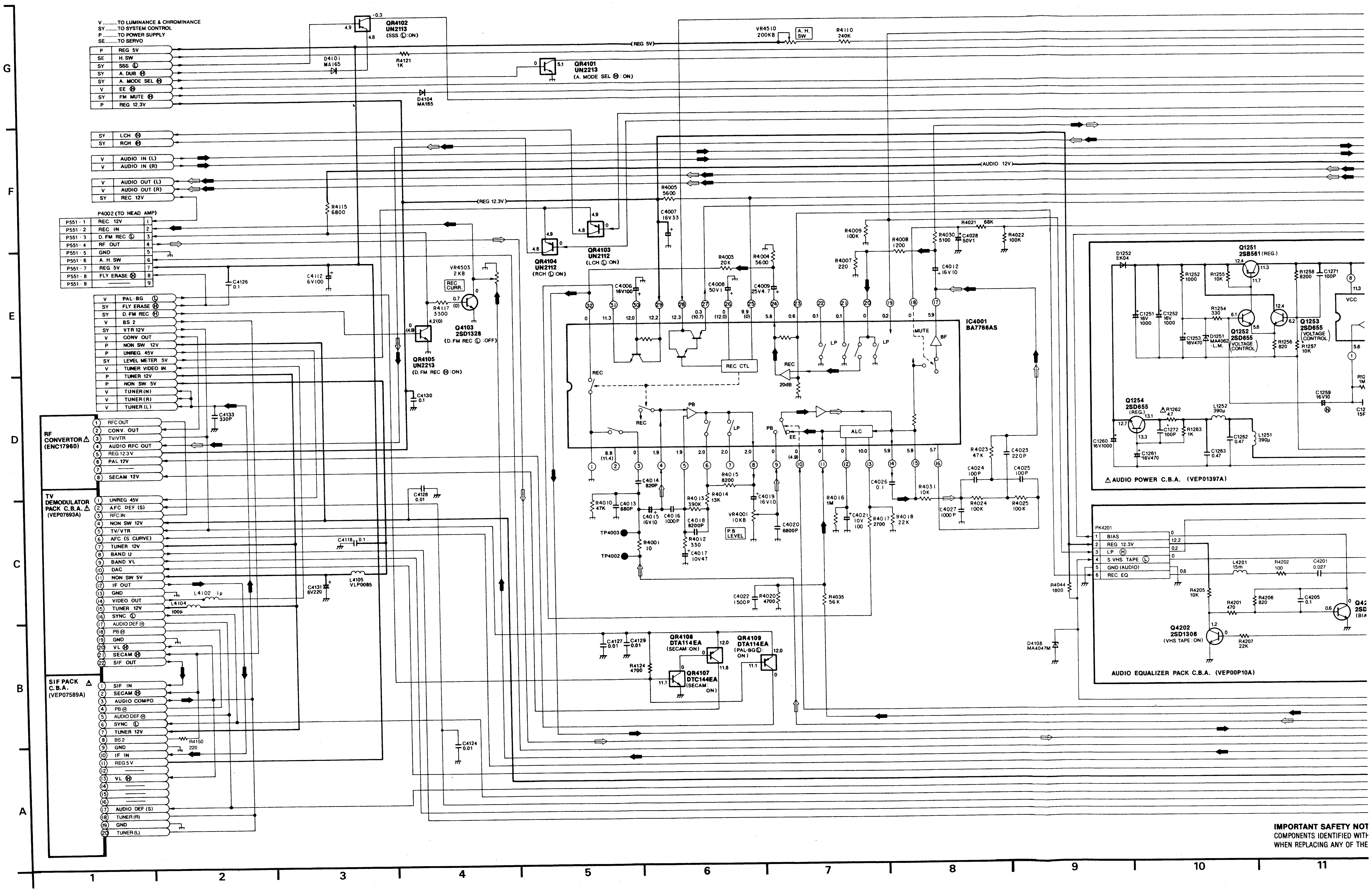
HEAD AMP C.B.A.	
Transistor	
Q501	C-2
Integrated Circuit	
IC501	B-2
IC502	A-4
IC551	B-4
Test Point	
TP507	C-4
TP508	C-3
TP4507	C-5
Adjustment	
VR501	C-3
VR502	C-2
Connector	
P501	C-1
P502	A-1
P551	C-5

ADDRESS INFORMATION

3-31. AUDIO SCHEMATIC DIAGRAM

MAIN SIGNAL PATH IN REC MODE

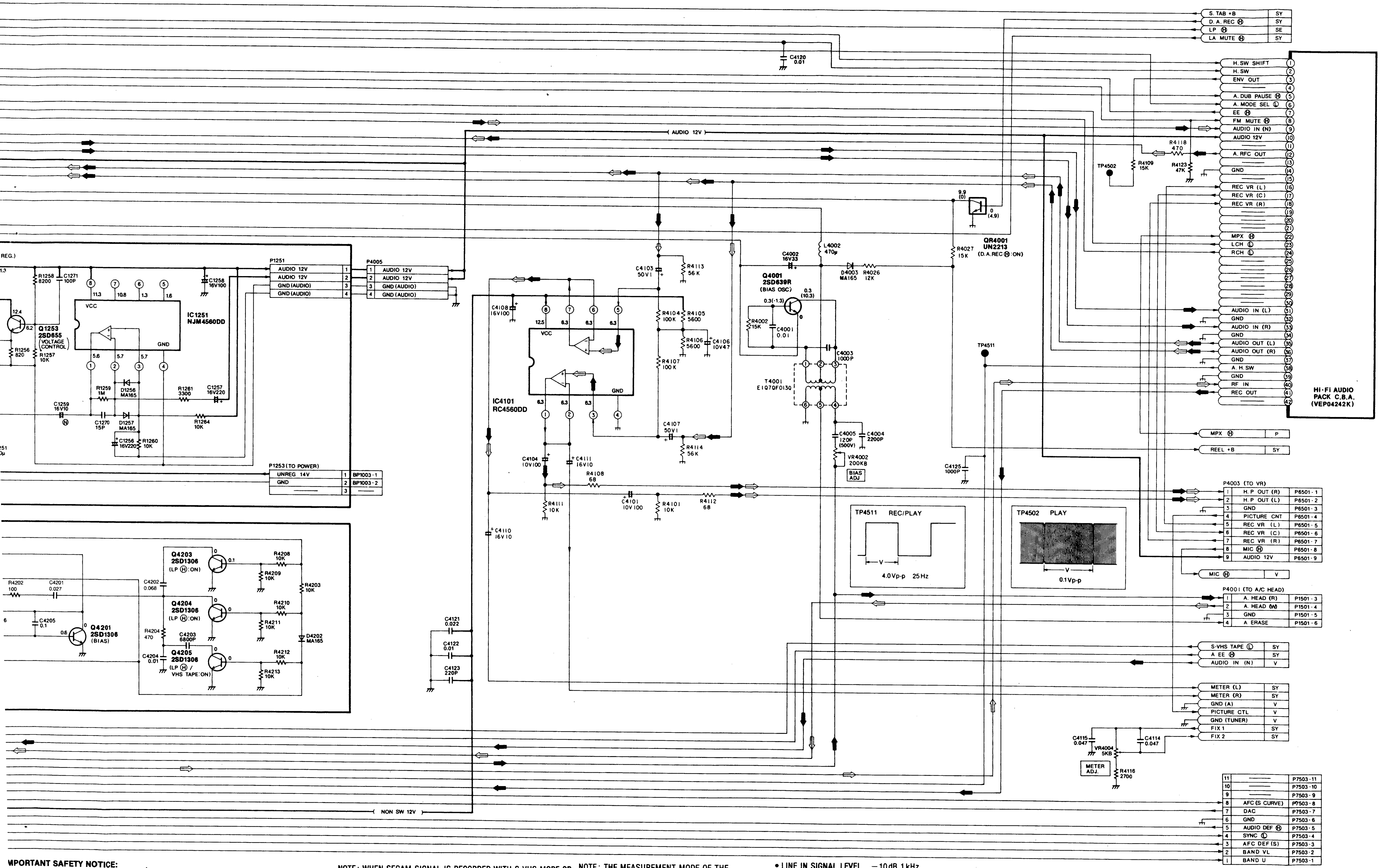
MAIN SIGNAL PATH IN PLAYBACK


V.......TO LUMINANCE & CHROMINANCE
SY.......TO SYSTEM CONTROL
P.......TO POWER SUPPLY
SE.......TO SERVO
REG 5V
H. SW
SSS Ⓛ
A. DUB Ⓗ
A. MODE SEL Ⓗ
EE Ⓗ
FM MUTE Ⓗ
REG 12.3V
LCH Ⓗ
RCH Ⓗ
AUDIO IN (L)
AUDIO IN (R)
AUDIO OUT (L)
AUDIO OUT (R)
REC 12V
P4002 (TO HEAD AMP)
REC IN
D. FM REC Ⓛ
RF OUT
GND
A. H. SW
REG 5V
FLY ERASE Ⓗ
PAL·BG Ⓛ
D. FM REC Ⓗ
BS 2
VTR 12V
CONV OUT
NON SW 12V
UNREG 45V
LEVEL METER 5V
TUNER VIDEO IN
TUNER 12V
NON SW 5V
TUNER (N)
TUNER (R)
TUNER (L)
RF CONVERTOR (ENC17960)
TV DEMODULATOR PACK C.B.A. (VEP07693A)
SIF PACK C.B.A. (VEP07589A)
QR4102 UN2113 (SSS Ⓛ:ON)
QR4101 UN2213 (A. MODE SEL Ⓗ:ON)
QR4103 UN2112 (LCH Ⓛ:ON)
QR4104 UN2112 (RCH Ⓛ:ON)
QR4105 UN2213 (D. FM REC Ⓗ:ON)
Q4103 2SD1328 (D. FM REC Ⓛ:OFF)
QR4108 DTA114EA (SECAM:ON)
QR4109 DTA114EA (PAL·BGⓁ: ON)
QR4107 DTC144EA (SECAM: ON)
IC4001 BA7766AS
REC CTL
ALC
MUTE
BF
REC
PB
LP
EE
20dB
P.B LEVEL
TP4003
TP4002
VR4510 200KB
A. H. SW
R4110 240K
(REG 5V)
(REG 12.3V)
(AUDIO 12V)
VR4503 2KB
REC CURR.
VR4001 10KB
D4101 MA165
D4104 MA165
D4108 MA4047M
Q1251 2SB561 (REG.)
Q1252 2SD655 (VOLTAGE CONTROL)
Q1253 2SD655 (VOLTAGE CONTROL)
Q1254 2SD655 (REG.)
D1252 EK04
D1251 MA4062 -L.M.
L1252 390µ
L1251 390µ
AUDIO POWER C.B.A. (VEP01397A)
PK4201
BIAS
REG 12.3V
LP Ⓗ
S VHS TAPE Ⓛ
GND (AUDIO)
REC EQ
L4201 15m
Q4202 2SD1306 (VHS TAPE: ON)
AUDIO EQUALIZER PACK C.B.A. (VEP00P10A)
A
B
C
D
E
F
G
1
2
3
4
5
6
7
8
9
10
11

IMPORTANT SAFETY NOT
COMPONENTS IDENTIFIED WIT
WHEN REPLACING ANY OF THE

Back Page:
HEAD AMP Section

H IN PLAYBACK MODE


S. TAB +B
D. A. REC Ⓗ
LP Ⓗ
LA MUTE Ⓗ
C4120 0.01
H.SW SHIFT
H.SW
ENV OUT
A. DUB PAUSE Ⓗ
A. MODE SEL Ⓛ
EE Ⓗ
FM MUTE Ⓗ
AUDIO IN (N)
AUDIO 12V
A. RFC OUT
GND
REC VR (L)
REC VR (C)
REC VR (R)
MPX Ⓗ
LCH Ⓛ
RCH Ⓛ
AUDIO IN (L)
AUDIO IN (R)
AUDIO OUT (L)
AUDIO OUT (R)
A. H.SW
RF IN
REC OUT
HI-FI AUDIO PACK C.B.A. (VEP04242K)
(AUDIO 12V)
QR4001 UN2213 (D.A.REC Ⓗ:ON)
TP4502
TP4511
Q4001 2SD639R (BIAS OSC)
T4001 E1Q70F0130
VR4002 200KB
BIAS ADJ
IC1251 NJM4560DD
Q1253 2SD655 (VOLTAGE CONTROL)
P1251
P4005
P1253 (TO POWER)
IC4101 RC4560DD
Q4203 2SD1306 (LP Ⓗ:ON)
Q4204 2SD1306 (LP Ⓗ:ON)
Q4205 2SD1306 (LP Ⓗ / VHS TAPE:ON)
Q4201 2SD1306 (BIAS)
TP4511 REC/PLAY
4.0Vp-p 25Hz
TP4502 PLAY
0.1Vp-p
P4003 (TO VR)
P4001 (TO A/C HEAD)
MPX Ⓗ
REEL +B
MIC Ⓗ
S-VHS TAPE Ⓛ
A EE Ⓗ
METER (L)
METER (R)
PICTURE CTL
FIX 1
FIX 2
METER ADJ.
VR4004 5KB
(NON SW 12V)

IMPORTANT SAFETY NOTICE:
OMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
/HEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

NOTE: WHEN SECAM SIGNAL IS RECORDED WITH S-VHS MODE OR LP MODE, SECAM SIGNAL IS AUTOMATICALLY CONVERTED TO PAL SIGNAL AND IT IS RECORDED.

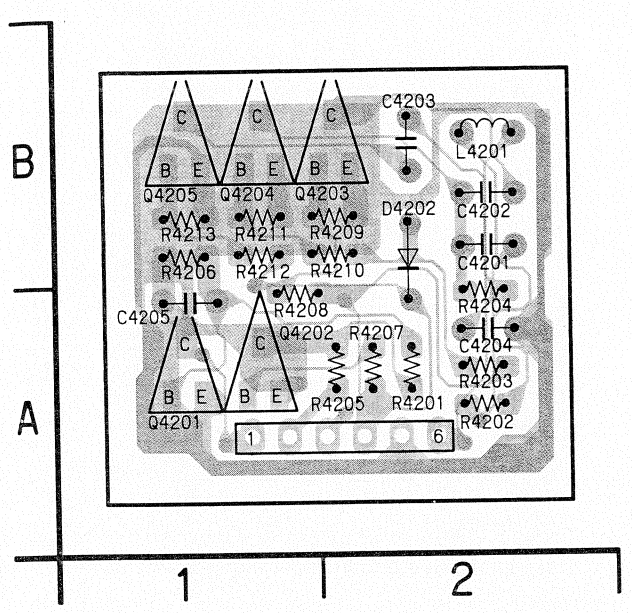
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGES ARE FOLLOWING CONDITION. (S-VHS: SECAM : SP MODE)

- LINE IN SIGNAL LEVEL...−10dB 1kHz
- MEASUREMENT MODE
  REC...BRACKETS ( )
  PLAY...WITHOUT BRACKETS

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

11 12 13 14 15 16 17 18 19 20 21

3-32. AUDIO EQUALIZER PACK C.B.A. (VEP00P10A)


B
A
1
2
C4203
L4201
Q4205
Q4204
Q4203
D4202
C4202
R4213
R4211
R4209
C4201
R4206
R4212
R4210
C4205
R4208
R4204
Q4202
R4207
C4204
R4203
Q4201
R4205
R4201
R4202
1
6

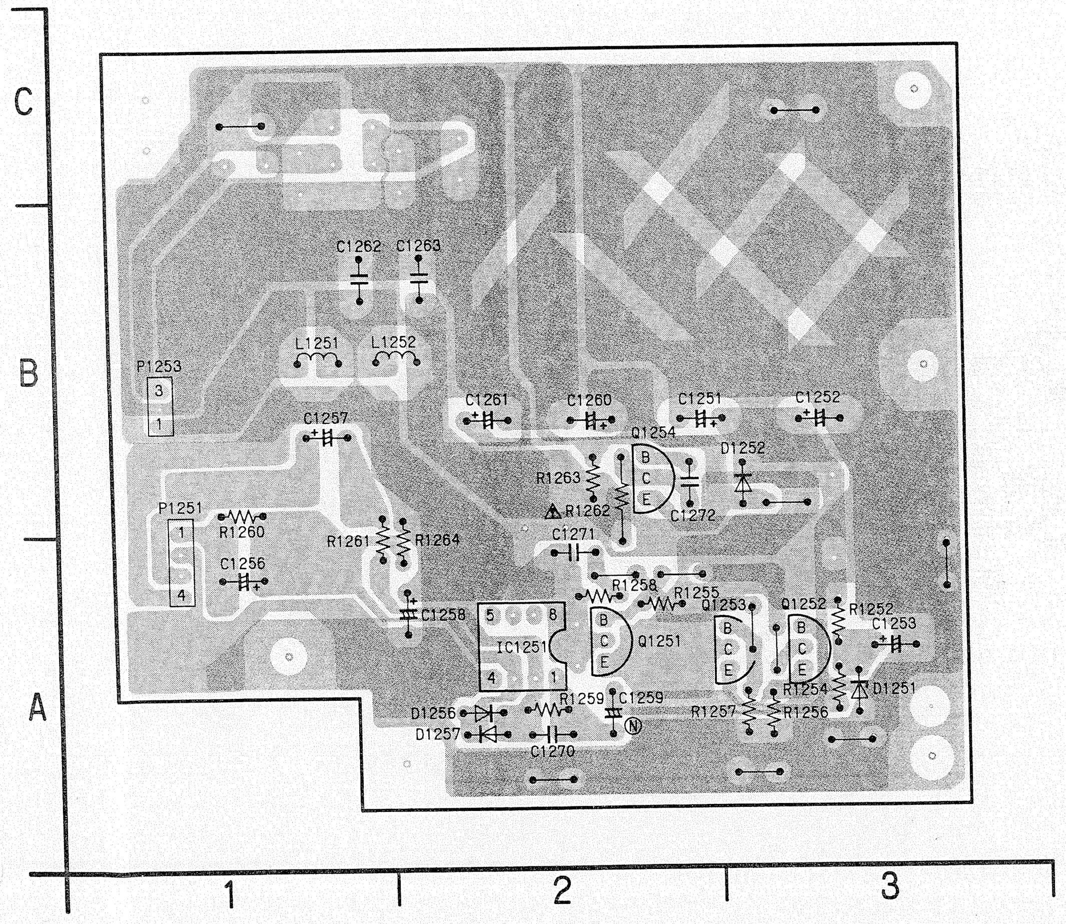
AUDIO EQ PACK C.B.A.	
Transistor	
Q4201	A-1
Q4202	A-1
Q4203	B-2
Q4204	B-1
Q4205	B-1

ADDRESS INFORMATION

AUDIO POWER C.B.A.	
Transistor	
Q1251	A-2
Q1252	A-3
Q1253	A-3
Q1254	B-2
Integrated Circuit	
IC1251	A-2
Connector	
P1251	B-1
P1253	B-1

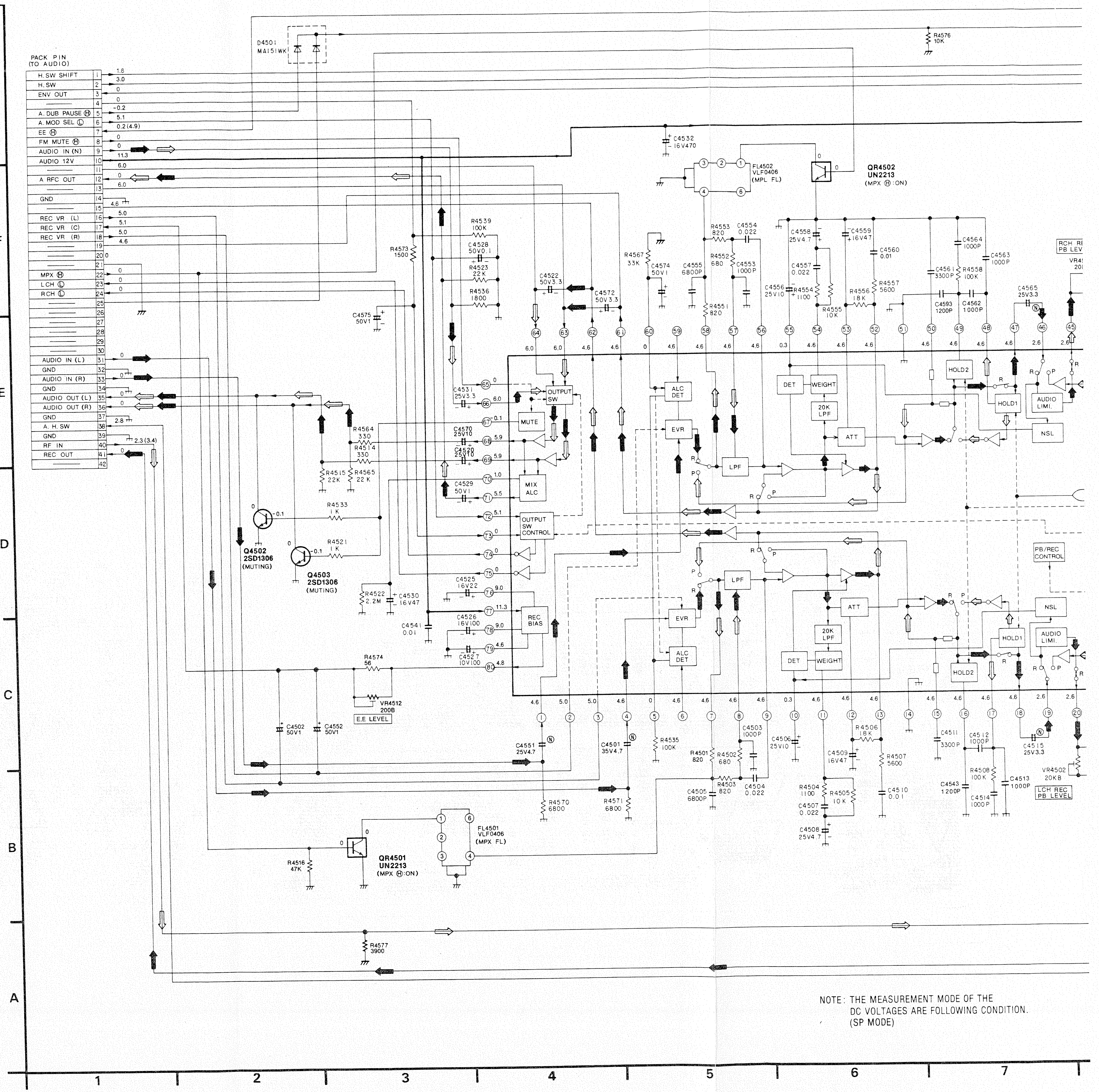
ADDRESS INFORMATION

3-33. AUDIO POWER C.B.A. (VEP01397A)


C
B
A
1
2
3
C1262
C1263
P1253
L1251
L1252
C1257
C1261
C1260
C1251
C1252
Q1254
D1252
R1263
R1262
C1272
P1251
R1260
R1261
R1264
C1271
C1256
R1258
R1255
Q1253
Q1252
R1252
C1258
IC1251
Q1251
C1253
R1254
D1251
D1256
R1259
C1259
R1257
R1256
D1257
C1270

3-34. Hi-Fi AUDIO PACK SCHEMATIC DIAGRAM

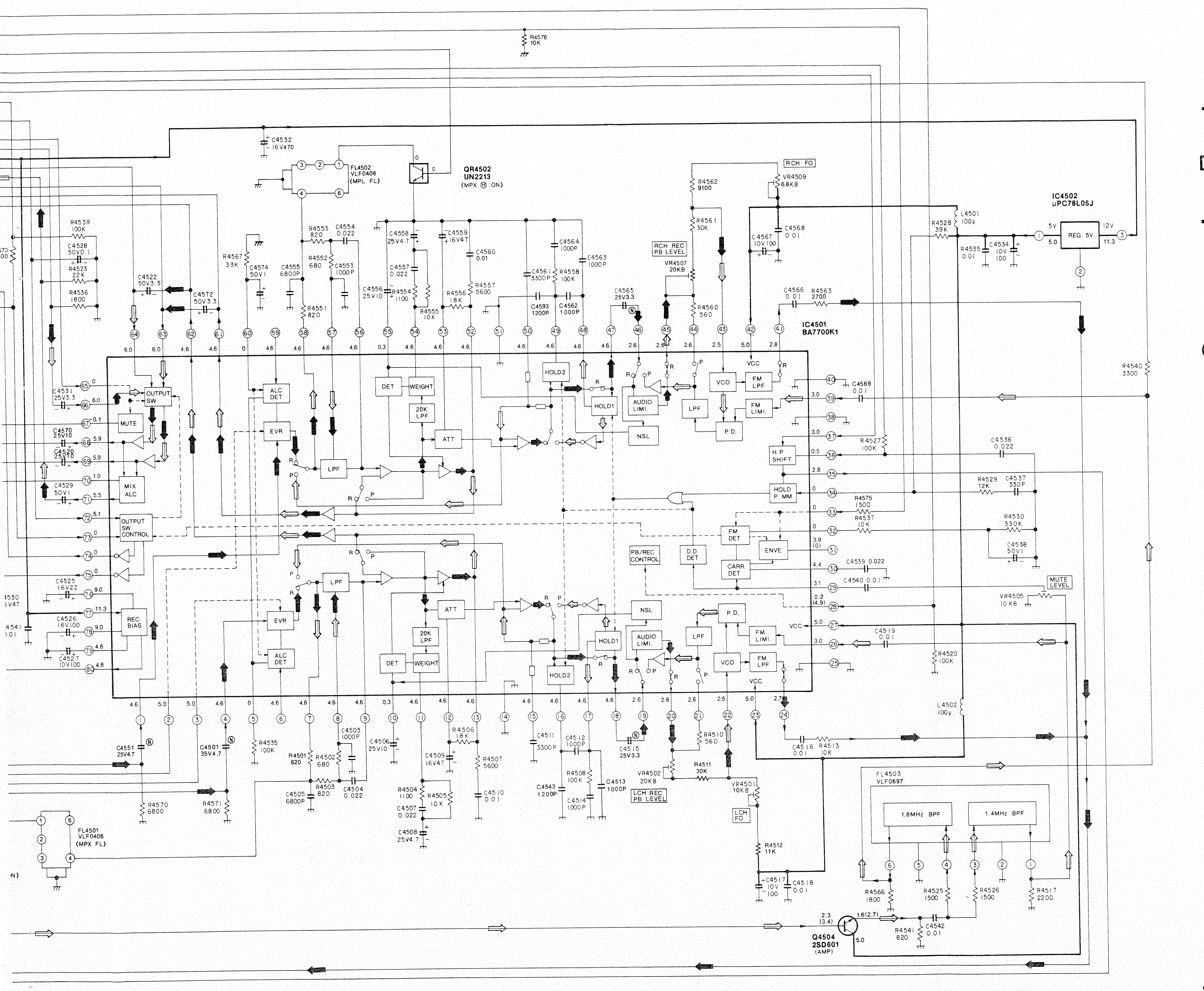
MAIN SIGNAL PATH IN REC MODE


PACK PIN (TO AUDIO)
H.SW SHIFT
H.SW
ENV OUT
A.DUB PAUSE Ⓗ
A.MOD SEL Ⓛ
EE Ⓗ
FM MUTE Ⓗ
AUDIO IN (N)
AUDIO 12V
A RFC OUT
GND
REC VR (L)
REC VR (C)
REC VR (R)
MPX Ⓗ
LCH Ⓛ
RCH Ⓛ
AUDIO IN (L)
GND
AUDIO IN (R)
GND
AUDIO OUT (L)
AUDIO OUT (R)
GND
A.H.SW
GND
RF IN
REC OUT
D4501 MA151WK
FL4502 VLF0406 (MPL FL)
QR4502 UN2213 (MPX Ⓗ:ON)
Q4502 2SD1306 (MUTING)
Q4503 2SD1306 (MUTING)
QR4501 UN2213 (MPX Ⓗ:ON)
FL4501 VLF0406 (MPX FL)
VR4512 200B E.E LEVEL
VR4502 20KB LCH REC PB LEVEL
RCH REC PB LEVEL
OUTPUT SW
MUTE
MIX ALC
OUTPUT SW CONTROL
REC BIAS
ALC DET
EVR
LPF
DET
WEIGHT
20K LPF
ATT
HOLD1
HOLD2
AUDIO LIMI.
NSL
PB/REC CONTROL
G
F
E
D
C
B
A
1
2
3
4
5
6
7

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGES ARE FOLLOWING CONDITION. (SP MODE)

AGRAM

◀ MAIN SIGNAL PATH IN REC MODE   ⇦ MAIN SIGNAL PATH IN PLAYBACK MODE

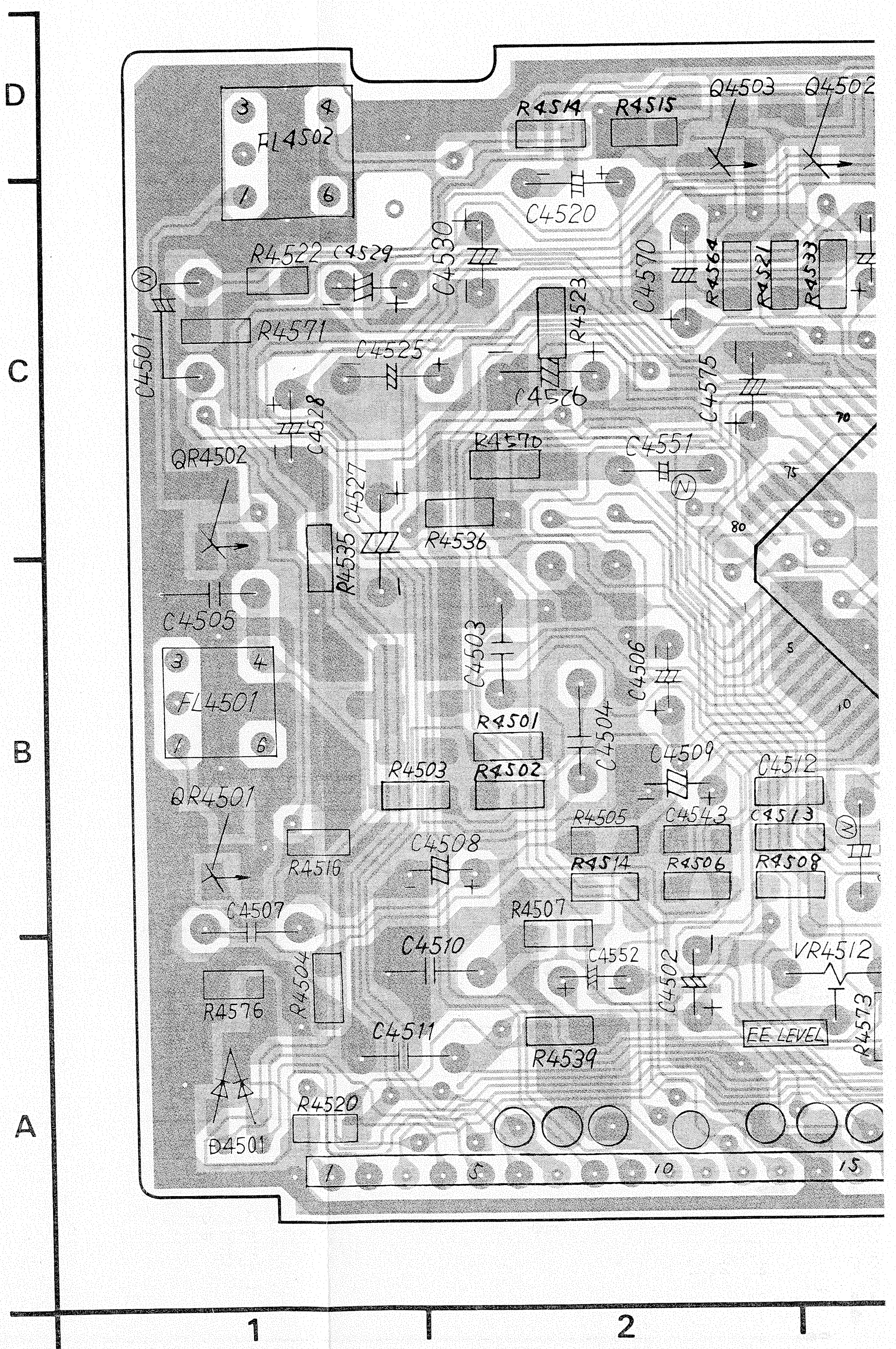

IC4501
BA7700K1
QR4502
UN2213
(MPX Ⓑ:ON)
IC4502
μPC78L05J
REG 5V
FL4502
VLF0406
(MPL FL)
FL4501
VLF0406
(MPX FL)
FL4503
VLF0697
1.8MHz BPF
1.4MHz BPF
Q4504
2SD601
(AMP)
RCH FO
VR4509
6.8KB
RCH REC PB LEVEL
VR4507
20KB
LCH REC PB LEVEL
VR4502
20KB
LCH FO
VR4501
10KB
MUTE LEVEL
VR4505
10KB
L4501
100μ
L4502
100μ
OUTPUT SW
MUTE
MIX ALC
OUTPUT SW CONTROL
REC BIAS
ALC DET
EVR
LPF
DET
WEIGHT
20K LPF
ATT
HOLD2
HOLD1
AUDIO LIMI.
NSL
VCO
FM LPF
FM LIMI.
P.D.
H.P SHIFT
HOLD P.MM
FM DET
ENVE
CARR DET
D.D. DET
PB/REC CONTROL
VCC

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGES ARE FOLLOWING CONDITION. (SP MODE)

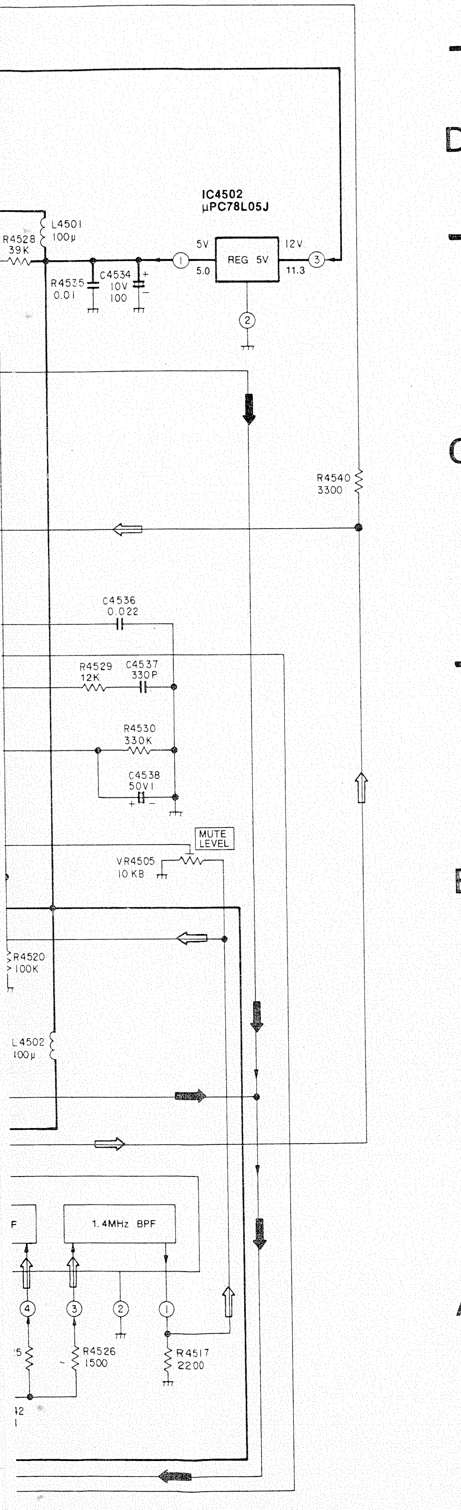
- LINE IN SIGNAL LEVEL...−10dB 1kHz
- MEASUREMENT MODE
  REC...BRACKETS (   )
  PLAY...WITHOU BRACKETS

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

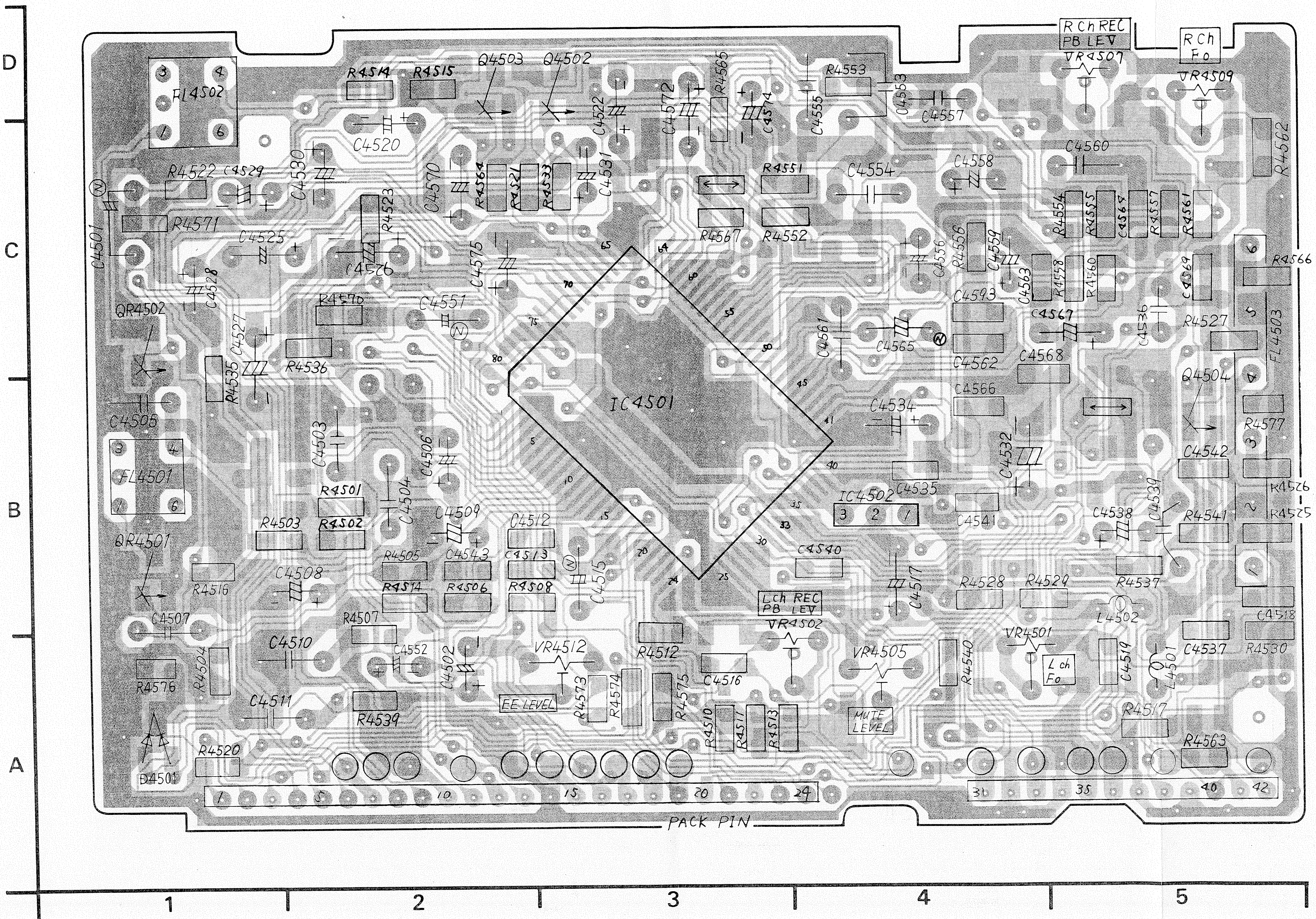
3-35. Hi-Fi AUDIO PACK C.B.A. (VEP04242K)


D
C
B
A
1
2
FL4502
FL4501
Q4503
Q4502
QR4502
QR4501
D4501
R4514
R4515
R4522
R4571
R4535
R4536
R4570
R4501
R4503
R4502
R4505
R4506
R4508
R4516
R4507
R4504
R4576
R4539
R4520
C4520
C4529
C4530
C4570
C4501
C4525
C4526
C4528
C4527
C4575
C4551
C4505
C4503
C4506
C4504
C4509
C4512
C4543
C4513
C4508
C4507
C4510
C4552
C4502
C4511
VR4512
EE LEVEL
R4573
R4523
70
75
80
5
10
15
1

3-35. Hi-Fi AUDIO PACK C.B.A. (VEP04242K)


IC4502
µPC78L05J
REG 5V
5V
12V
5.0
11.3
L4501 100µ
R4528 39K
R4535 0.01
C4534 10V 100
R4540 3300
C4536 0.022
R4529 12K
C4537 330P
R4530 330K
C4538 50V1
MUTE LEVEL
VR4505 10KB
R4520 100K
L4502 100µ
1.4MHz BPF
R4526 1500
R4517 2200
10

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.


D
C
B
A
1
2
3
4
5
FL4502
R4514
R4515
Q4503
Q4502
C4520
R4522
C4529
C4530
C4570
R4564
R4521
R4533
C4522
C4531
C4572
R4565
C4574
C4555
R4553
C4553
C4557
R Ch REC PB LEV
VR4507
R Ch Fo
VR4509
R4562
C4501
R4571
C4525
C4526
R4523
C4575
C4528
R4551
R4567
R4552
C4554
C4558
C4560
C4556
R4556
C4559
C4563
R4554
R4555
C4564
R4557
R4561
R4558
R4560
C4569
R4566
QR4502
R4570
C4551
C4527
R4536
R4535
C4505
C4593
C4567
C4536
R4527
C4561
C4565
C4562
C4568
FL4503
IC4501
C4566
Q4504
C4534
R4577
C4532
C4542
FL4501
C4503
C4506
R4501
C4504
R4503
R4502
C4509
C4512
IC4502
C4535
C4541
R4526
R4525
C4538
C4539
R4541
QR4501
R4505
C4543
C4513
C4540
R4516
C4508
R4514
R4506
R4508
C4515
C4517
R4528
R4529
R4537
C4507
R4507
Lch REC PB LEV
VR4502
L4502
C4518
C4510
C4552
C4502
VR4512
R4512
VR4505
R4540
VR4501
C4537
R4530
R4504
R4576
C4516
L ch Fo
C4519
L4501
C4511
R4539
EE LEVEL
R4573
R4574
R4575
R4510
R4511
R4513
MUTE LEVEL
R4517
R4520
R4563
D4501
PACK PIN
1
5
10
15
20
24
31
35
40
42

Hi-Fi AUDIO PACK C.B.A.	
Transistor	
Q4502	D-3
Q4503	D-2
Q4504	B-5
Transistor & Resistor	
QR4501	B-1
QR4502	C-1
Integrated Circuit	
IC4501	B-3
IC4502	B-4
Adjustment	
VR4501	A-4
VR4502	A-4
VR4505	A-4
VR4507	D-5
VR4509	D-5
VR4512	A-3

ADDRESS INFORMATION

Next Page:
TV DEMODULATOR Section

3-36. TV DEMODULATOR PACK SCHEMATIC DIAGRAM

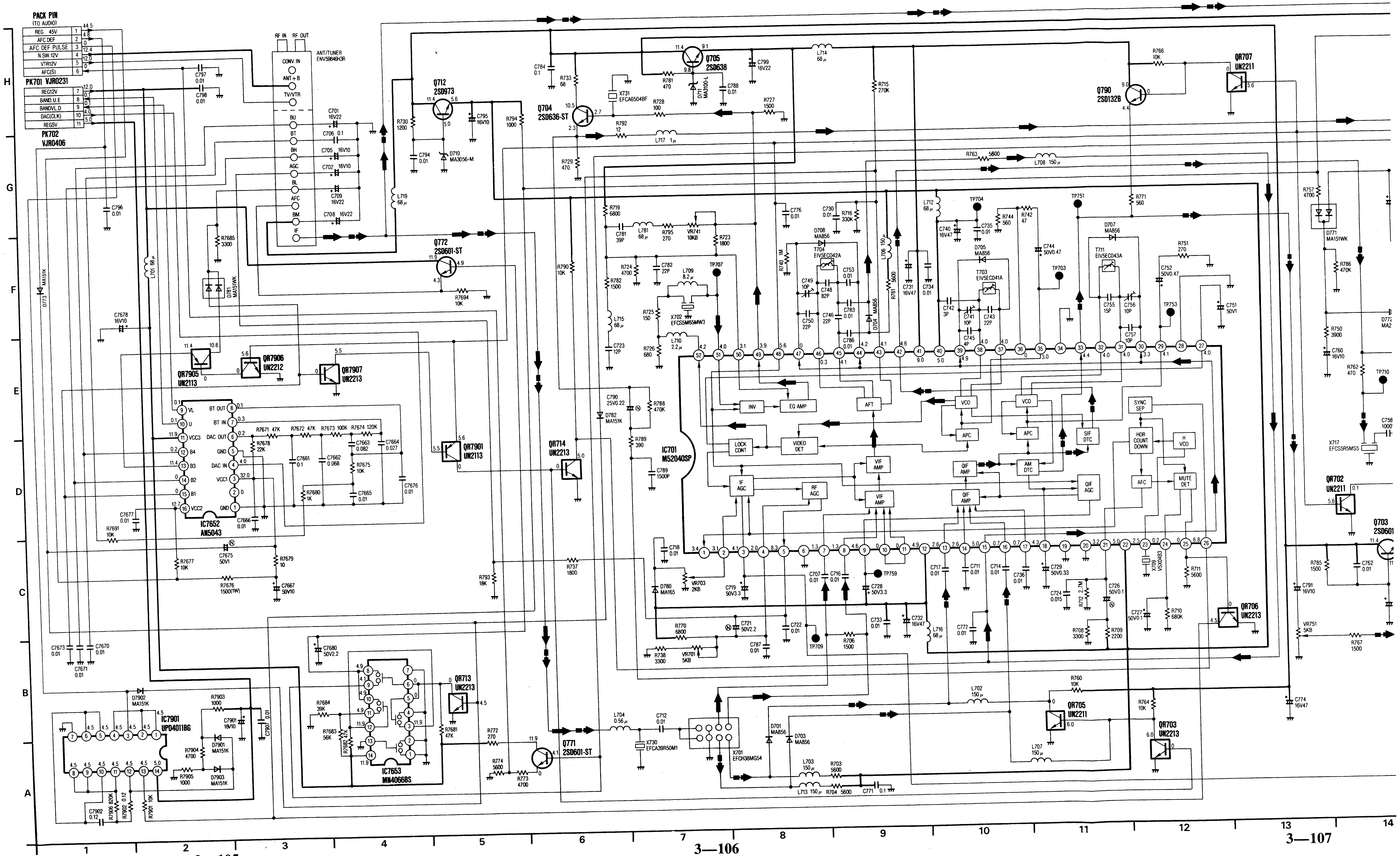
VIDEO SIGNAL PATH

AUDIO SIGNAL PATH

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MA
WHEN REPLACING ANY OF THESE COMP

NOTE: THE MEASUREMENT MODE (

NOTE: DO NOT USE ANY PART NU
ORDERING. WHEN YOU OI

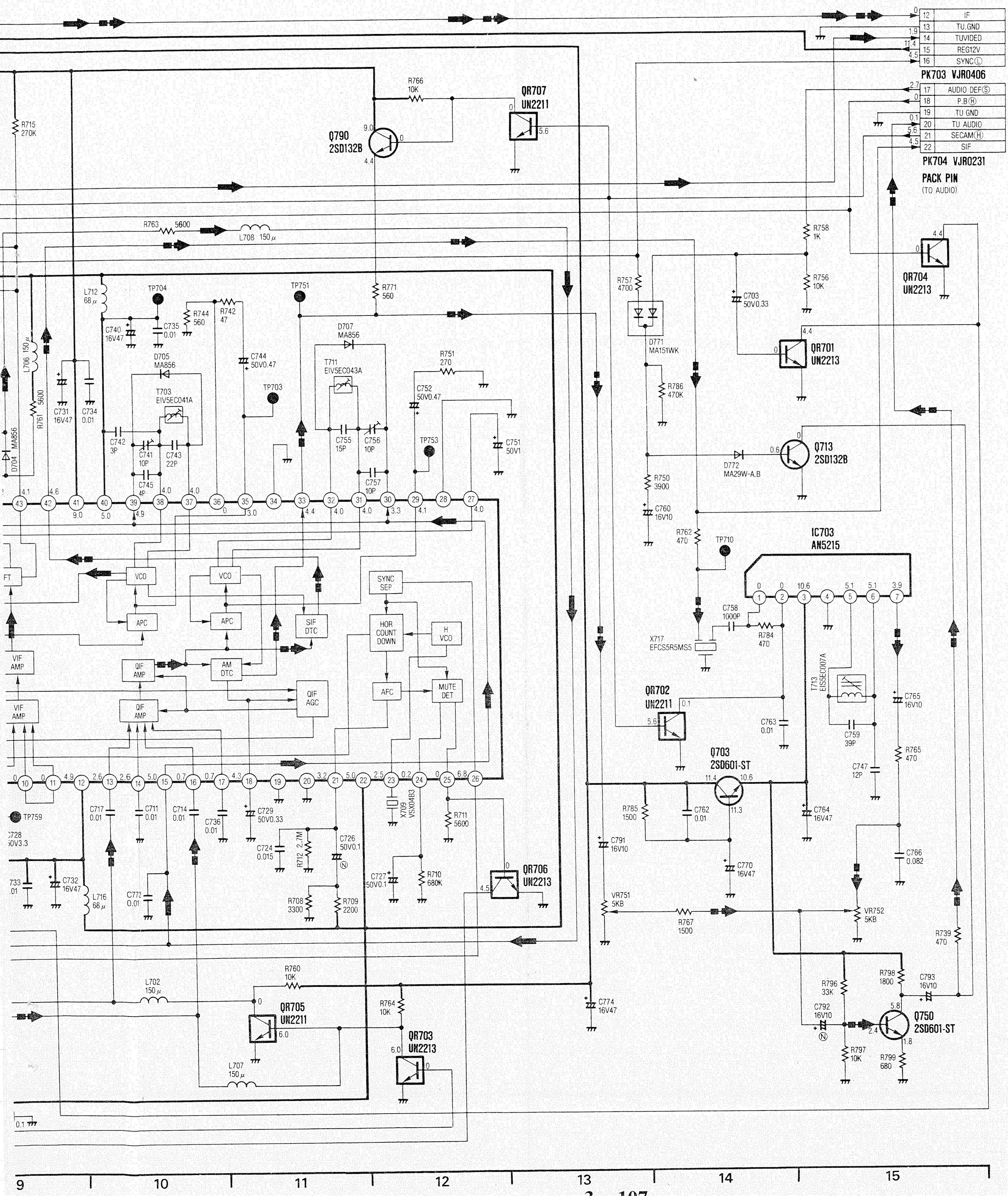

PACK PIN
(TO AUDIO)
REG 45V
AFC DEF
AFC DEF PULSE
N.SW.12V
VTR12V
AFC(S)
PK701 VJR0231
REG12V
BAND.U.E
BANDVL.D
DAC(CLK)
REG5V
PK702 VJR0406
RF IN
RF OUT
CONV IN
ANT+B
TV/VTR
BU
BT
BH
AGC
BL
AFC
BM
IF
ANT/TUNER ENV59846H3R
Q712 2SD973
Q772 2SD601-ST
Q704 2SD636-ST
Q705 2SD638
Q790 2SD132B
QR707 UN2211
D710 MA3056-M
D711 MA3100-L
X731 EFCA6504BF
L714 68μ
L717 1μ
L708 150μ
L719 68μ
L701 68μ
D7815 MA151WK
D773 MA151K
QR7905 UN2113
QR7906 UN2212
QR7907 UN2213
QR7901 UN2113
QR714 UN2213
IC7652 AN5043
VL
U
VCC3
B4
B3
B2
B1
VCC2
BT OUT
BT IN
DAC OUT
GND
DAC IN
VCC1
IC701 M52040SP
INV
EQ AMP
AFT
VCO
APC
SIF DTC
SYNC SEP
HOR COUNT DOWN
H VCO
LOCK CONT
VIDEO DET
VIF AMP
QIF AMP
AM DTC
QIF AGC
AFC
MUTE DET
IF AGC
RF AGC
T704 EIV5EC042A
T703 EIV5EC041A
T711 EIV5EC043A
D708 MA856
D705 MA856
D707 MA856
D704 MA856
X702 EFCS5M65MW3
X709 VSX0483
TP704
TP751
TP703
TP707
TP753
TP759
TP709
TP710
D771 MA151WK
X717 EFCS5R5MS5
QR702 UN2211
Q703 2SD601
QR706 UN2213
QR705 UN2211
QR703 UN2213
VR751 5KB
VR703 2KB
VR701 5KB
D780 MA165
D782 MA151K
IC7901 UPD4011BG
D7902 MA151K
D7901 MA151K
D7903 MA151K
IC7653 MN4066BS
QR713 UN2213
Q771 2SD601-ST
X730 EFCA39R50M1
X701 EFCH38MG54
D701 MA856
D703 MA856
L702 150μ
L703 150μ
L704 0.56μ
L707 150μ
L713 150μ
L716 68μ
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12
13
14

◀■ AUDIO SIGNAL PATH

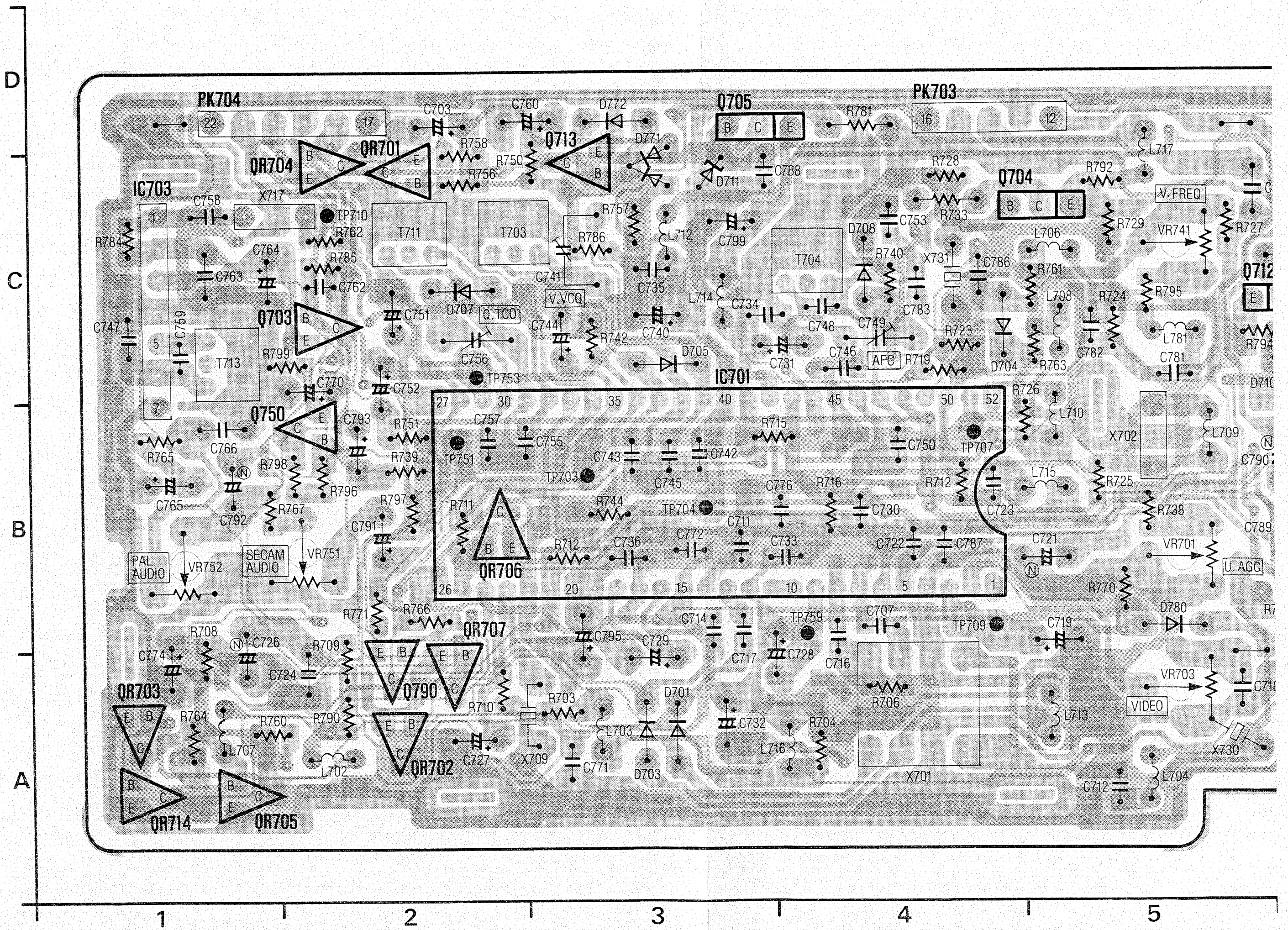
IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.


IF
TU.GND
TUVIDEO
REG12V
SYNC(L)
PK703 VJR0406
AUDIO DEF(S)
P.B(H)
TU GND
TU AUDIO
SECAM(H)
SIF
PK704 VJR0231
PACK PIN
(TO AUDIO)
QR707 UN2211
Q790 2SD1328
QR704 UN2213
QR701 UN2213
Q713 2SD1328B
D771 MA151WK
D772 MA29W-A.B
IC703 AN5215
X717 EFCS5R5MS5
QR702 UN2211
Q703 2SD601-ST
QR706 UN2213
QR705 UN2211
QR703 UN2213
Q750 2SD601-ST
T703 EIV5EC041A
T711 EIV5EC043A
T713 ESSEC007A
D705 MA856
D707 MA856
VCO
APC
SIF DTC
SYNC SEP
HOR COUNT DOWN
H VCO
AM DTC
QIF AMP
QIF AGC
AFC
MUTE DET
VIF AMP
VR751 5KB
VR752 5KB
9
10
11
12
13
14
15

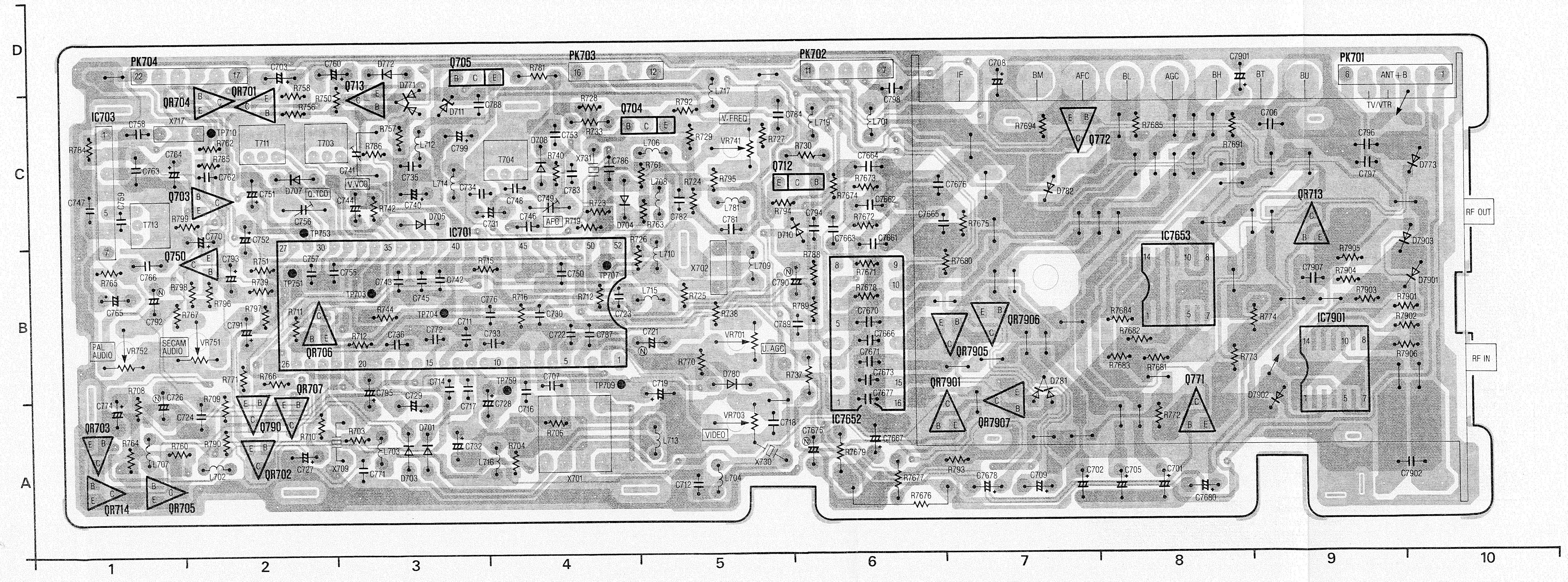
3-37. TV DEMODULATOR PACK C.B.A. (VEP07693A)


PK704
PK703
IC703
IC701
Q705
Q704
QR704
QR701
Q713
Q703
Q750
QR706
QR707
Q790
QR702
QR703
QR714
QR705
T711
T703
T704
T713
PAL AUDIO
SECAM AUDIO
V.VCO
Q.TCO
APC
V-FREQ
U.AGC
VIDEO
X702
X709
X730
X701
D
C
B
A
1
2
3
4
5

3-37. TV DEMODULATOR PACK C.B.A. (VEP07693A)

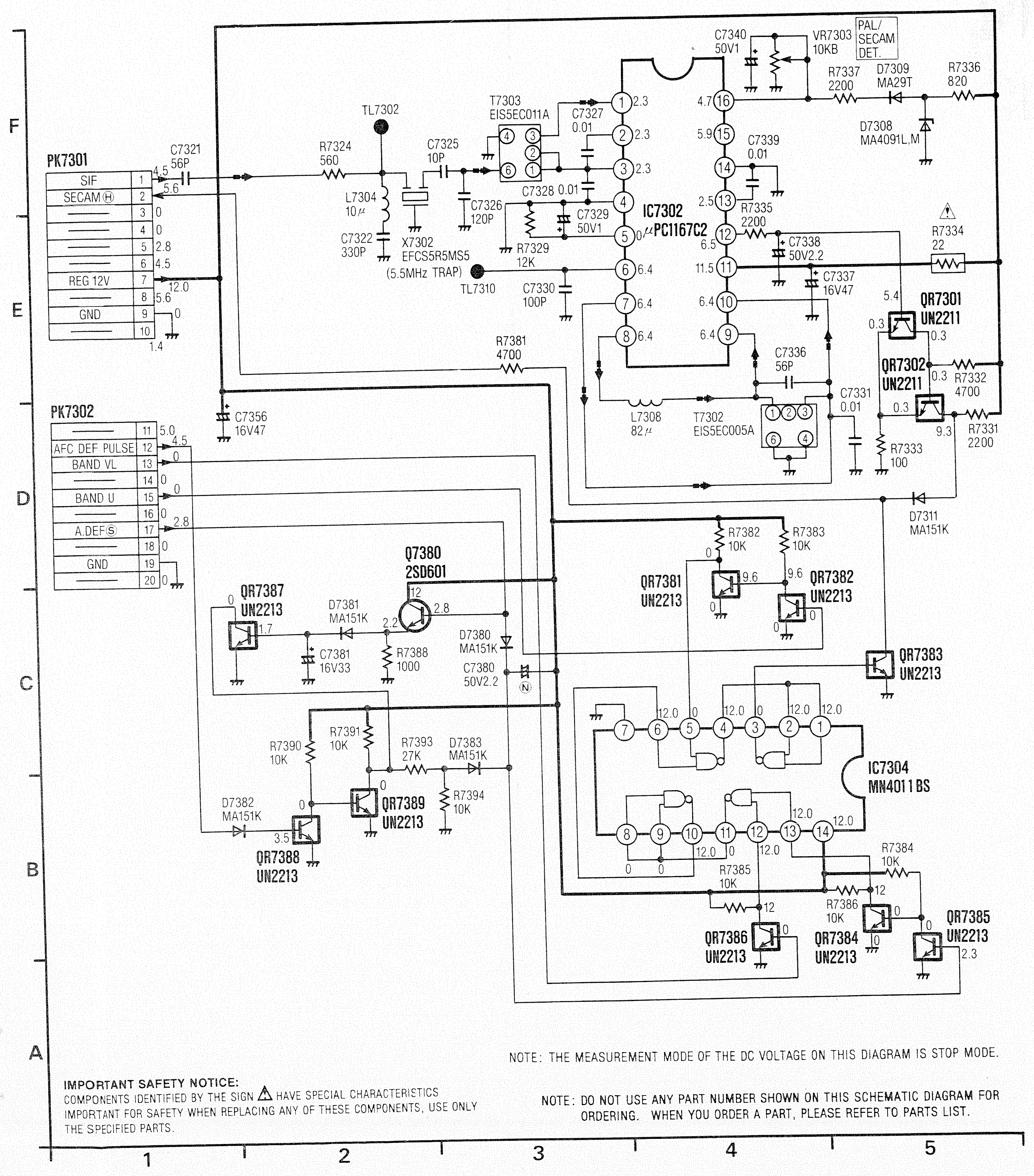
TV DEMODULATOR PACK C.B.A.	
Transistor	
Q703	C-2
Q704	C-4
Q705	D-3
Q712	C-6
Q713	C-3
Q750	B-2
Q771	A-8
Q772	C-7
Q790	A-2
Transistor & Resistor	
QR701	C-2
QR702	A-2
QR703	A-1
QR704	C-2
QR705	A-1
QR706	B-2
QR707	A-2
QR713	A-1
QR714	A-1
QR7901	A-7
QR7905	B-7
QR7906	B-7
QR7907	A-7
Integrated Circuit	
IC701	B-3
IC703	C-1
IC7653	B-8
IC7901	B-9
Test Point	
TP703	B-3
TP704	B-3
TP707	B-4
TP710	C-2
TP751	B-2
TP753	C-2
TP759	A-4
Adjustment	
VR701	B-5
VR703	A-5
VR741	C-5
VR751	B-1
VR752	B-1
Connector	
PK701	D-9
PK702	D-6
PK703	D-4
PK704	D-1

ADDRESS INFORMATION


D
C
B
A
1
2
3
4
5
6
7
8
9
10
PK704
PK703
PK702
PK701
Q705
Q704
Q712
Q713
Q703
Q750
Q772
Q771
QR701
QR702
QR703
QR704
QR705
QR706
QR707
Q790
QR713
QR714
QR7901
QR7905
QR7906
QR7907
IC701
IC703
IC7652
IC7653
IC7901
IF
BM
AFC
BL
AGC
BH
BT
BU
ANT+B
TV/VTR
RF OUT
RF IN
V.FREQ
V.VCO
Q.TCO
AFC
U.AGC
VIDEO
PAL AUDIO
SECAM AUDIO
T711
T703
T704
T713
X701
X702
X709
X717
X730
X731
VR701
VR703
VR741
VR751
VR752
TP703
TP704
TP707
TP709
TP710
TP751
TP753
TP759

3-38. SIF PACK SCHEMATIC DIAGRAM

AUDIO SIGNAL PATH

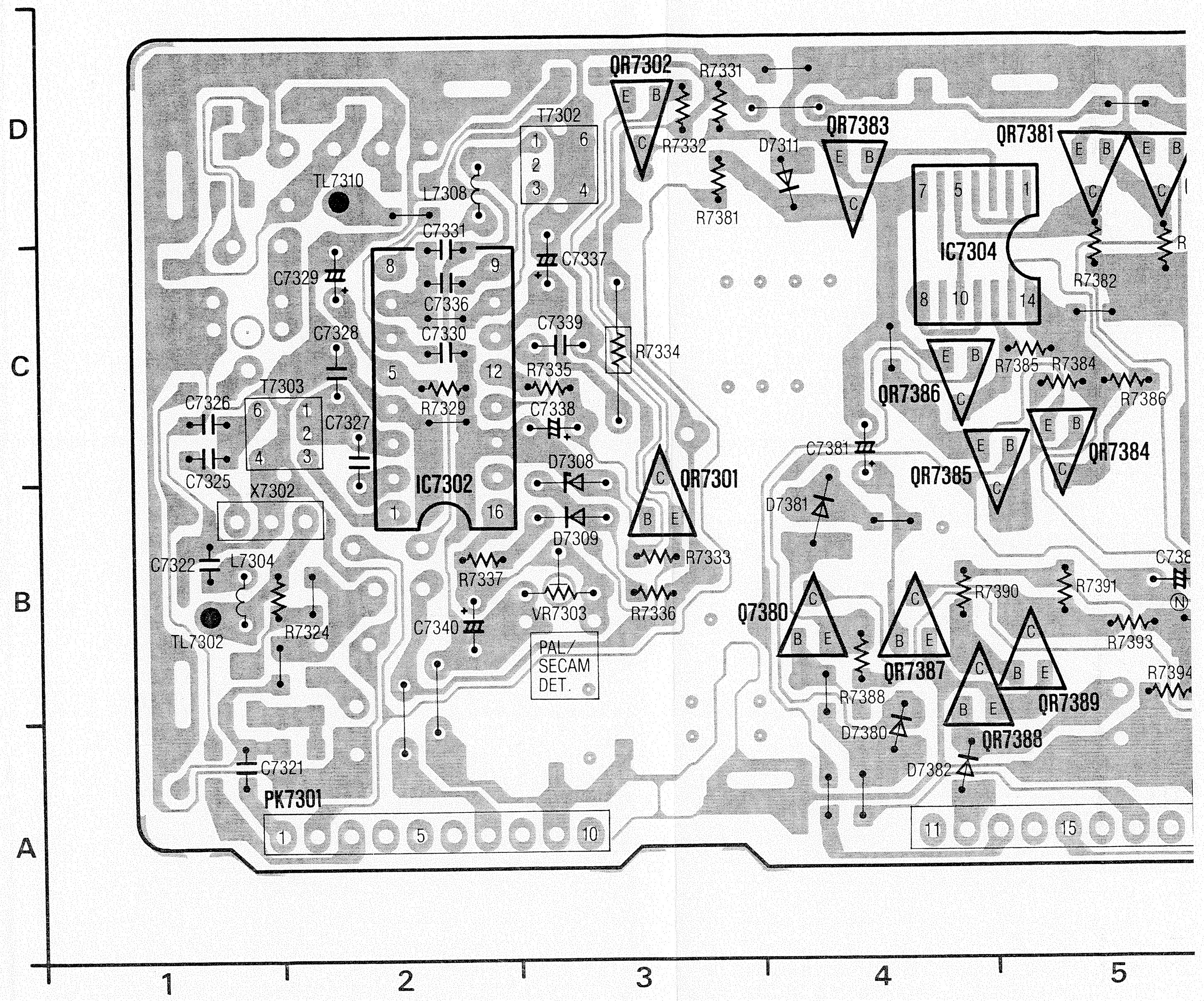

PK7301
SIF
SECAM Ⓗ
REG 12V
GND
C7321 56P
R7324 560
TL7302
L7304 10µ
C7322 330P
X7302 EFCS5R5MS5 (5.5MHz TRAP)
C7325 10P
C7326 120P
T7303 EIS5EC011A
C7327 0.01
C7328 0.01
C7329 50V1
R7329 12K
C7330 100P
TL7310
IC7302 µPC1167C2
C7340 50V1
VR7303 10KB
PAL/ SECAM DET.
R7337 2200
D7309 MA29T
R7336 820
D7308 MA4091L.M
C7339 0.01
R7335 2200
C7338 50V2.2
C7337 16V47
R7334 22
QR7301 UN2211
QR7302 UN2211
R7332 4700
R7331 2200
R7333 100
C7336 56P
C7331 0.01
L7308 82µ
T7302 EIS5EC005A
R7381 4700
C7356 16V47
PK7302
AFC DEF PULSE
BAND VL
BAND U
A.DEF Ⓢ
GND
D7311 MA151K
R7382 10K
R7383 10K
QR7381 UN2213
QR7382 UN2213
Q7380 2SD601
QR7387 UN2213
D7381 MA151K
C7381 16V33
R7388 1000
D7380 MA151K
C7380 50V2.2
QR7383 UN2213
IC7304 MN4011BS
R7390 10K
R7391 10K
R7393 27K
D7383 MA151K
R7394 10K
D7382 MA151K
QR7389 UN2213
QR7388 UN2213
R7384 10K
R7385 10K
R7386 10K
QR7386 UN2213
QR7384 UN2213
QR7385 UN2213
A
B
C
D
E
F
1
2
3
4
5

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

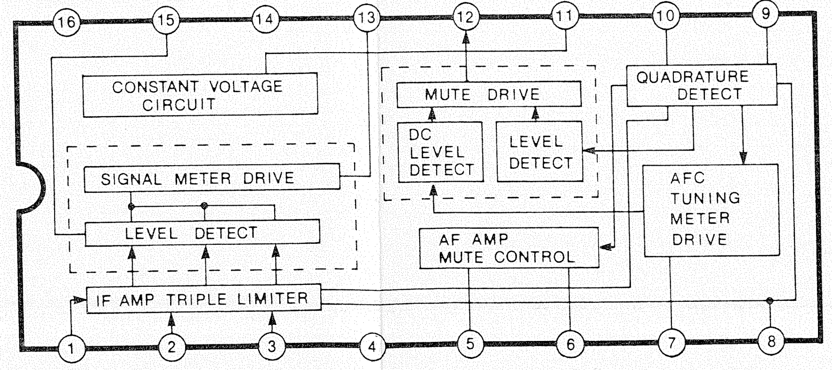
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

3-39. SIF PACK C.B.A. (VEP07698A)


QR7302
R7331
QR7383
QR7381
T7302
R7332
D7311
R7381
TL7310
L7308
C7331
C7337
IC7304
C7329
C7336
C7330
C7339
R7334
R7382
C7328
R7335
R7329
C7338
R7385
R7384
R7386
QR7386
C7326
T7303
C7327
D7308
QR7301
QR7384
C7381
QR7385
C7325
X7302
IC7302
D7309
D7381
C7322
L7304
R7337
R7333
VR7303
R7336
Q7380
R7390
R7391
TL7302
R7324
C7340
PAL/ SECAM DET.
QR7387
R7393
R7388
QR7389
R7394
D7380
QR7388
D7382
C7321
PK7301
A
B
C
D
1
2
3
4
5

IC BLOCK

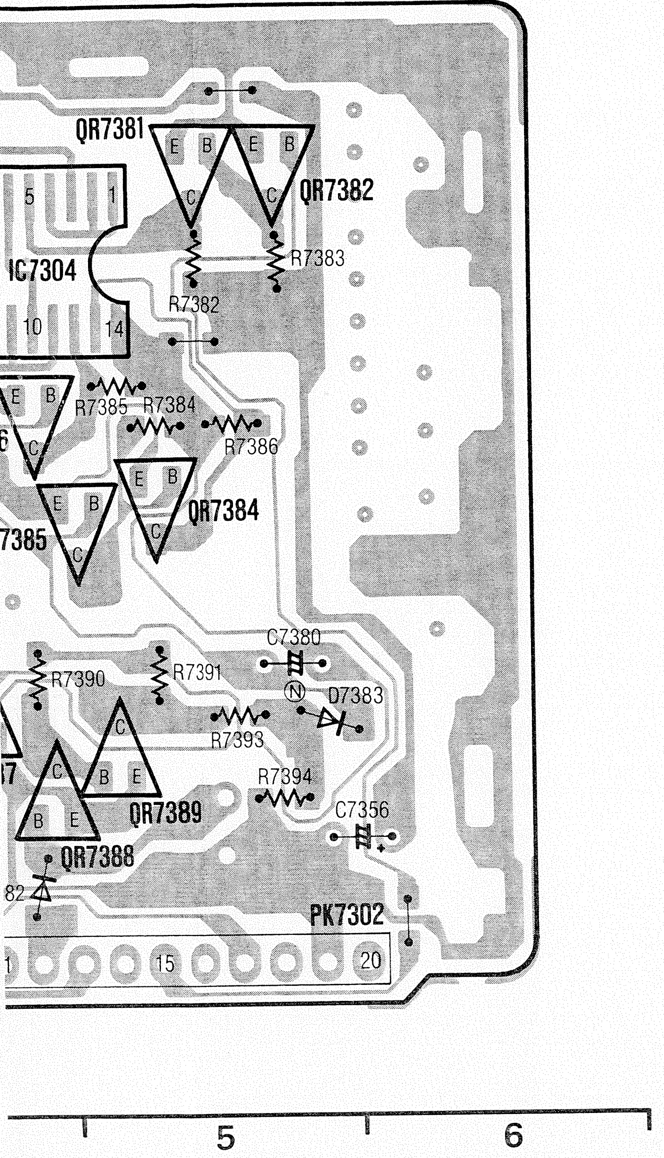
IC7302
(µPC1167C2)

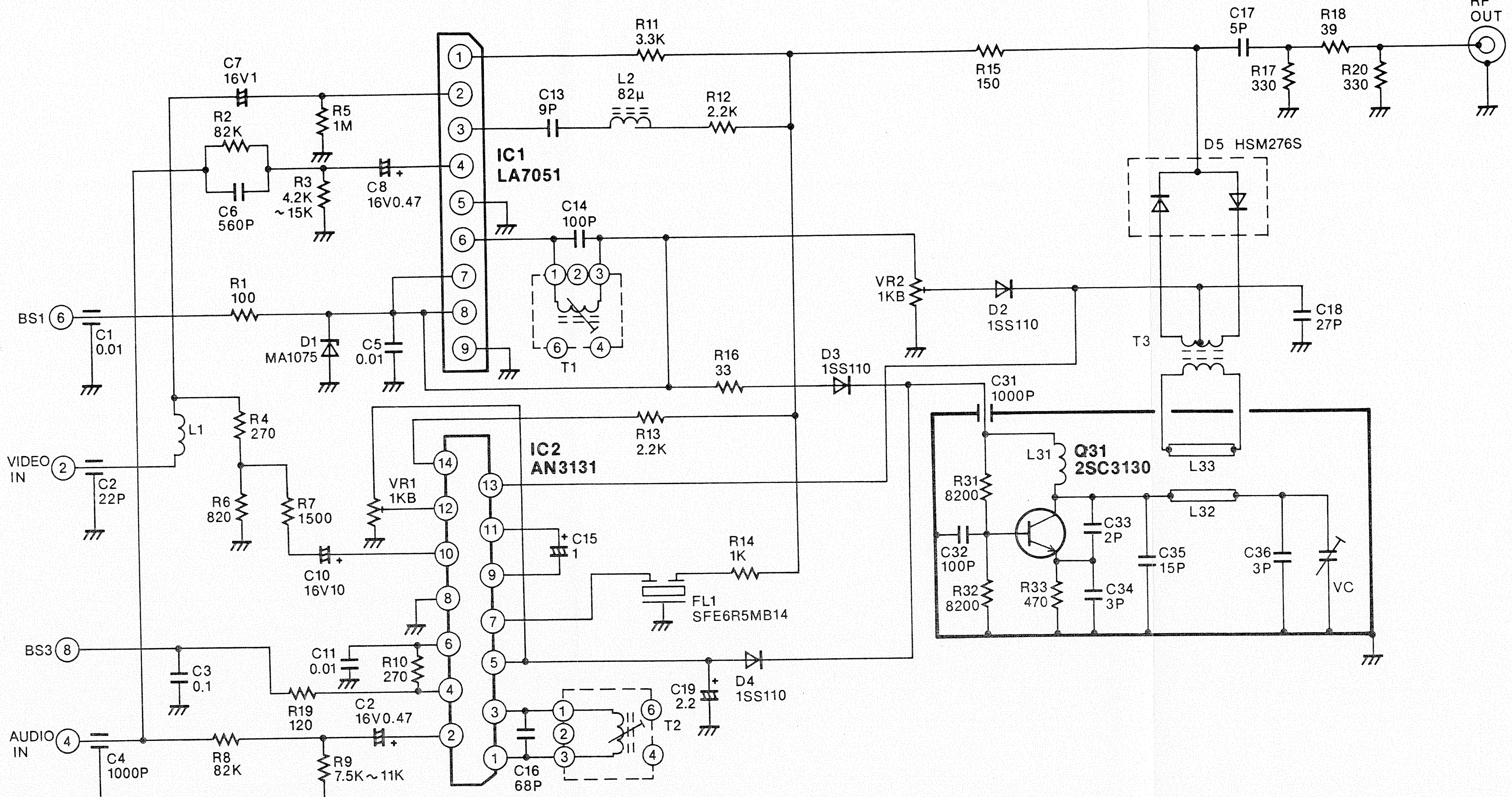

CONSTANT VOLTAGE CIRCUIT
MUTE DRIVE
DC LEVEL DETECT
LEVEL DETECT
QUADRATURE DETECT
SIGNAL METER DRIVE
LEVEL DETECT
AFC TUNING METER DRIVE
AF AMP MUTE CONTROL
IF AMP TRIPLE LIMITER
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16

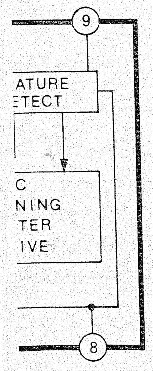
Transistor
Q7380
Transistor & I
QR7301 QR7302 QR7381 QR7382 QR7383 QR7384 QR7385 QR7386 QR7387 QR7388 QR7389

ADDRESS INFC

3-40. RF CONVERTER SCHEMATIC DIAGRAM (ENC17960)


QR7381
QR7382
IC7304
R7382
R7383
R7385
R7384
R7386
QR7384
7385
C7380
R7390
R7391
D7383
R7393
R7394
C7356
QR7389
QR7388
PK7302
15
20
5
6


IC1
LA7051
IC2
AN3131
Q31
2SC3130
RF OUT
BS1
VIDEO IN
BS3
AUDIO IN
R11 3.3K
R15 150
C17 5P
R18 39
R17 330
R20 330
D5 HSM276S
C7 16V1
R2 82K
R5 1M
C6 560P
R3 4.2K ~15K
C8 16V0.47
C13 9P
L2 82μ
R12 2.2K
C14 100P
T1
R1 100
C1 0.01
D1 MA1075
C5 0.01
VR2 1KB
D2 1SS110
C18 27P
T3
R16 33
D3 1SS110
C31 1000P
L1
R4 270
C2 22P
R6 820
R7 1500
R13 2.2K
VR1 1KB
C10 16V10
C15 1
R14 1K
FL1 SFE6R5MB14
L31
L33
L32
R31 8200
C32 100P
R32 8200
R33 470
C33 2P
C34 3P
C35 15P
C36 3P
VC
C3 0.1
C11 0.01
R10 270
R19 120
C2 16V0.47
C19 2.2
D4 1SS110
T2
C16 68P
C4 1000P
R8 82K
R9 7.5K ~ 11K


9
ATURE
ETECT
C
NING
TER
IVE
8

SIF PACK C.B.A.			
Transistor		**Integrated Circuit**	
Q7380	B-4	IC7302	C-2
Transistor & Resistor		IC7304	C-4
QR7301	B-3	**Test Land**	
QR7302	D-3	TL7302	B-1
QR7381	D-5	TL7310	D-2
QR7382	D-5	**Adjustment**	
QR7383	D-4	VR7303	B-3
QR7384	C-5	**Connector**	
QR7385	C-5	PK7301	A-2
QR7386	C-4	PK7302	A-5
QR7387	B-4		
QR7388	B-4		
QR7389	B-5		

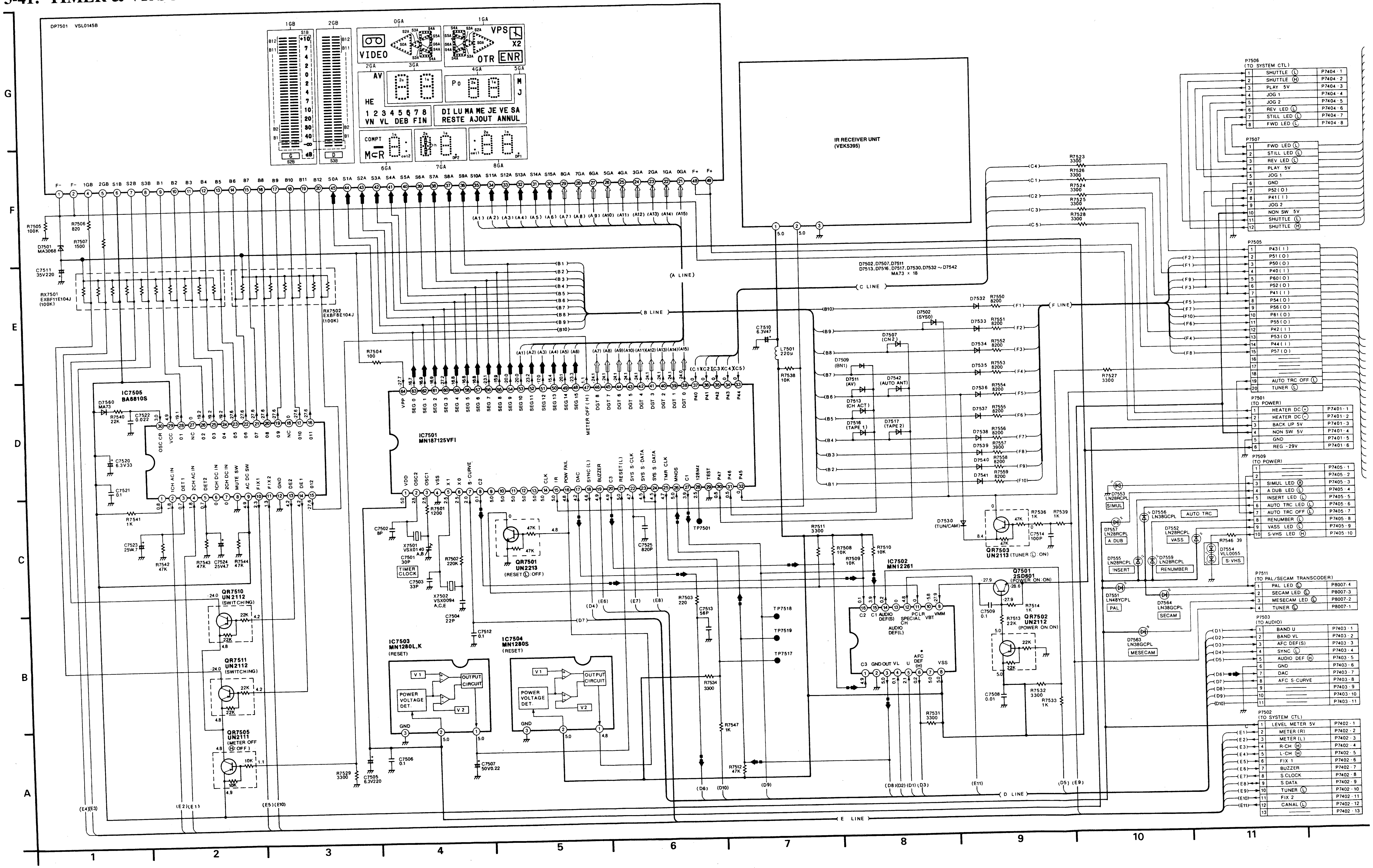
ADDRESS INFORMATION

3-41. TIMER & VR SCHEMATIC DIAGRAM

SEGMENT CONTROL SIGNAL

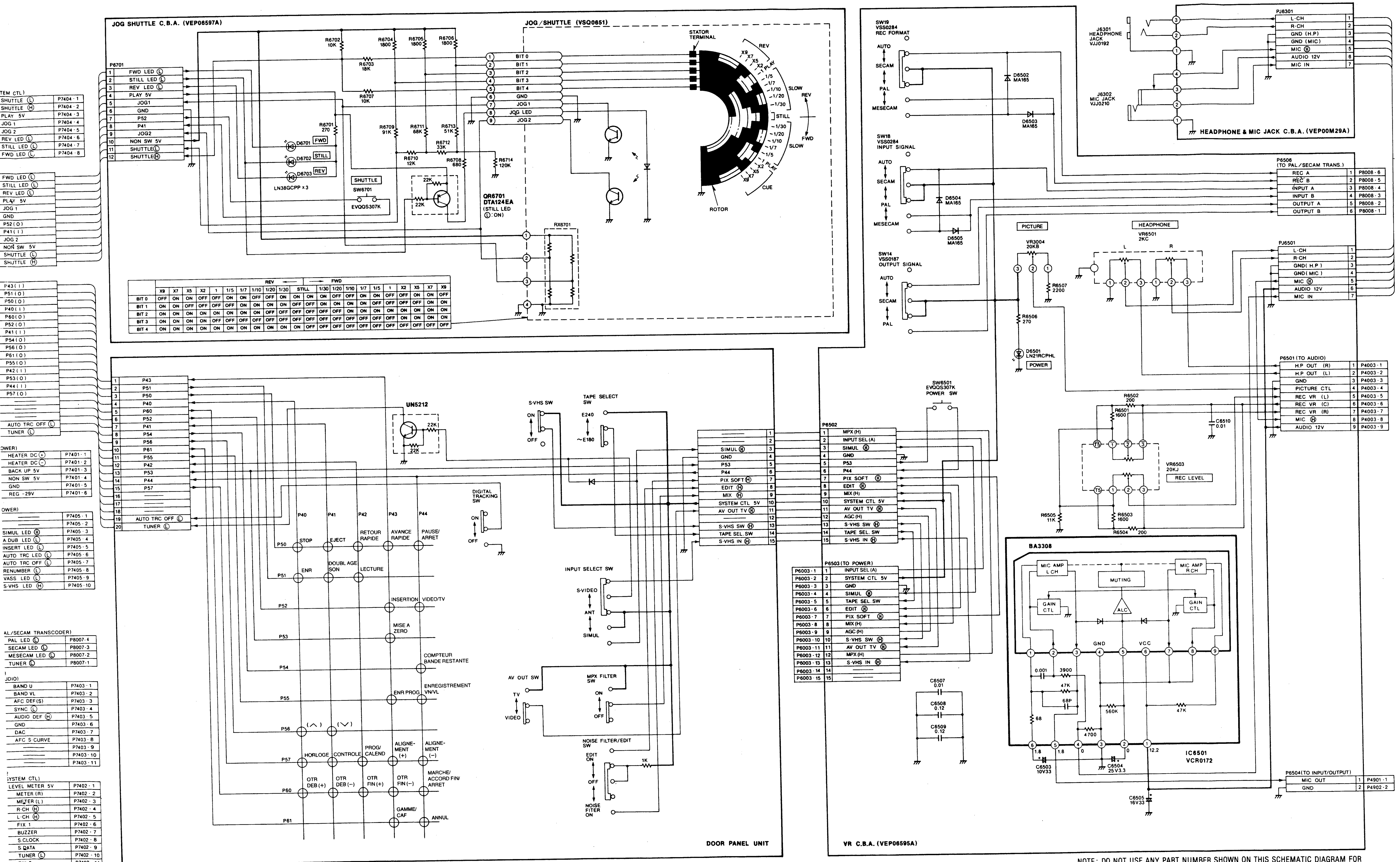
GRID CONTROL SIGNAL

TUNE CONTROL SIGNAL



DP7501 VSL0145B
IR RECEIVER UNIT (VEK5395)
IC7505 BA6810S
IC7501 MN187125VFI
IC7502 MN12261
IC7503 MN1280L,K (RESET)
IC7504 MN1280S (RESET)
QR7501 UN2213 (RESET Ⓛ OFF)
QR7503 UN2113 (TUNER Ⓛ ON)
Q7501 2SD601 (POWER ON:ON)
QR7502 UN2112 (POWER ON:ON)
QR7510 UN2112 (SWITCHING)
QR7511 UN2112 (SWITCHING)
QR7505 UN2111 (METER OFF Ⓗ OFF)
RX7501 EXBF11E104J (100K)
RX7502 EXBF8E104J (100K)
X7501 VSX0140 A,B
X7502 VSX0094 A,C,E
L7501 220μ
TIMER CLOCK
A LINE
B LINE
C LINE
D LINE
E LINE
F LINE
P7506 (TO SYSTEM CTL)
P7507
P7505
P7501 (TO POWER)
P7509 (TO POWER)
P7511 (TO PAL/SECAM TRANSCODER)
P7503 (TO AUDIO)
P7502 (TO SYSTEM CTL)
D7502, D7507, D7511, D7513, D7516, D7517, D7530, D7532 ~ D7542 MA73 × 18
SIMUL
A DUB
INSERT
AUTO TRC
VASS
RENUMBER
S-VHS
PAL
SECAM
MESECAM
TP7501
TP7517
TP7518
TP7519
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11

Back Page:
SIF PACK & RF CONV. Section


JOG SHUTTLE C.B.A. (VEP08597A)
JOG/SHUTTLE (VSQ0651)
P6701
FWD LED Ⓛ
STILL LED Ⓛ
REV LED Ⓛ
PLAY 5V
JOG1
GND
P52
P41
JOG2
NON SW 5V
SHUTTLE Ⓛ
SHUTTLE Ⓗ
BIT 0
BIT 1
BIT 2
BIT 3
BIT 4
JOG LED
STATOR TERMINAL
ROTOR
REV
FWD
SLOW
STILL
CUE
D6701
D6702
D6703
LN38GCPP x 3
SHUTTLE
SW6701
EVQQS307K
QR6701
DTA124EA
(STILL LED Ⓛ:ON)
RX6701
DOOR PANEL UNIT
UN5212
S-VHS SW
TAPE SELECT SW
DIGITAL TRACKING SW
INPUT SELECT SW
AV OUT SW
MPX FILTER SW
NOISE FILTER/EDIT SW
STOP
EJECT
RETOUR RAPIDE
AVANCE RAPIDE
PAUSE/ ARRET
ENR
DOUBL AGE SON
LECTURE
INSERTION
VIDEO/TV
MISE A ZERO
COMPTEUR BANDE RESTANTE
ENR PROG
ENREGISTREMENT VN/VL
HORLOGE
CONTROLE
PROG/ CALEND
ALIGNE- MENT (+)
ALIGNE- MENT (−)
OTR DEB (+)
OTR DEB (−)
OTR FIN (+)
OTR FIN (−)
MARCHE/ ACCORD FIN/ ARRET
GAMME/ CAF
ANNUL
VR C.B.A. (VEP06595A)
SW19 VSS0284 REC FORMAT
SW18 VSS0284 INPUT SIGNAL
SW14 VSS0187 OUTPUT SIGNAL
AUTO
SECAM
PAL
MESECAM
D6502 MA165
D6503 MA165
D6504 MA165
D6505 MA165
PICTURE
VR3004 20KB
HEADPHONE
VR6501 2KC
D6501 LN21RCPHL
POWER
SW6501 EVQQS307K POWER SW
P6502
P6503 (TO POWER)
P6506 (TO PAL/SECAM TRANS.)
PJ6501
P6501 (TO AUDIO)
VR6503 20KJ
REC LEVEL
BA3308
MIC AMP L CH
MIC AMP R CH
MUTING
ALC
GAIN CTL
IC6501 VCR0172
P6504 (TO INPUT/OUTPUT)
MIC OUT
GND
HEADPHONE & MIC JACK C.B.A. (VEP00M29A)
J6301 HEADPHONE JACK VJJ0192
J6302 MIC JACK VJJ0210
PJ6301
L-CH
R-CH
GND (H.P)
GND (MIC)
MIC Ⓗ
AUDIO 12V
MIC IN

	X9	X7	X5	X2	1	1/5	1/7	1/10	1/20	1/30	STILL		1/30	1/20	1/10	1/7	1/5	1	X2	X5	X7	X9
BIT 0	OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF	ON	ON	ON	ON	OFF	OFF	ON	ON	OFF	OFF	ON	ON	OFF
BIT 1	ON	ON	OFF	OFF	OFF	OFF	ON	ON	ON	ON	OFF	OFF	ON	ON	ON	ON	OFF	OFF	OFF	OFF	ON	ON
BIT 2	ON	ON	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON	ON	ON	ON	ON
BIT 3	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON
BIT 4	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF

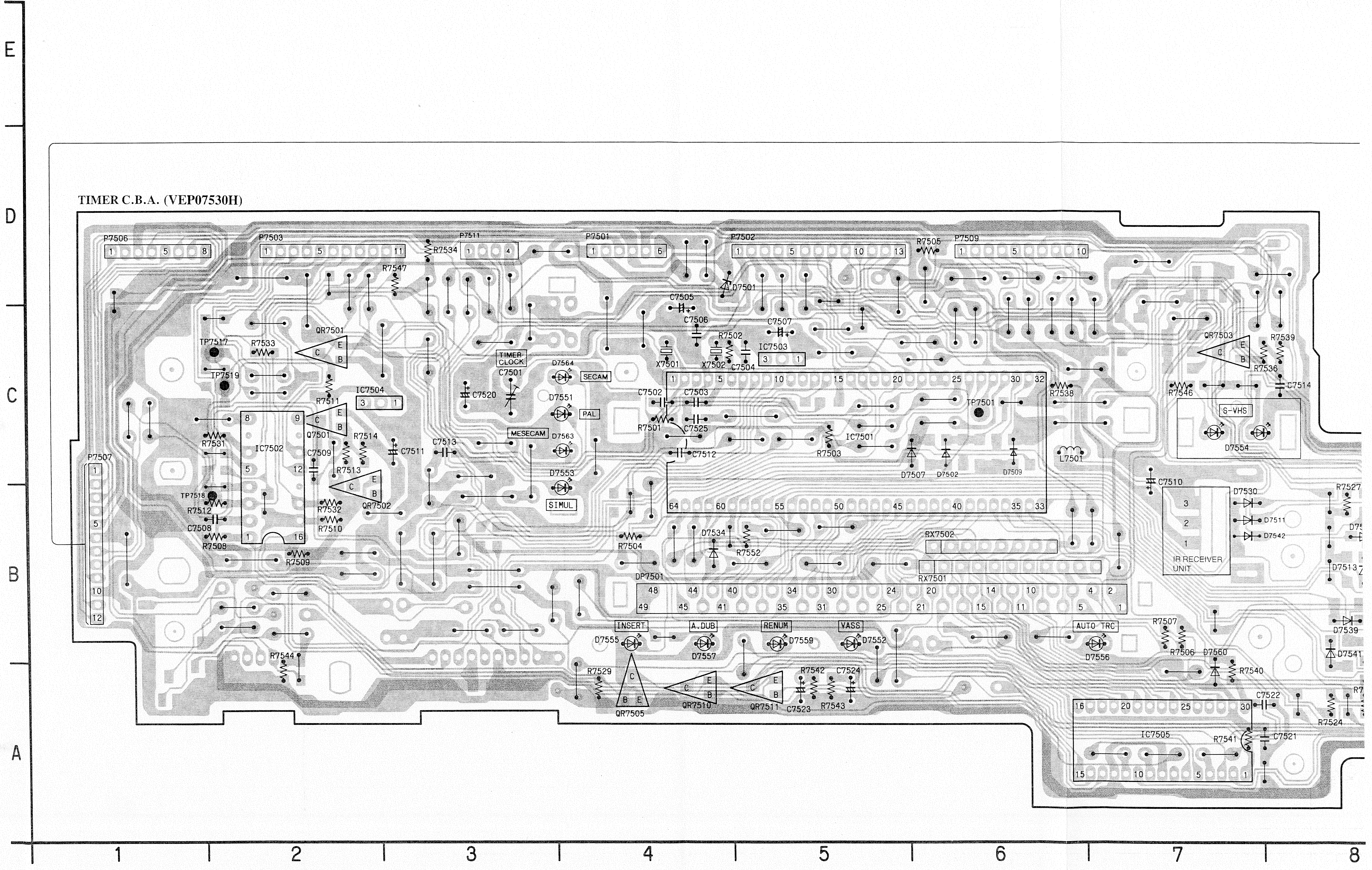
REV ← → FWD

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE. (S-VHS: SP MODE)

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

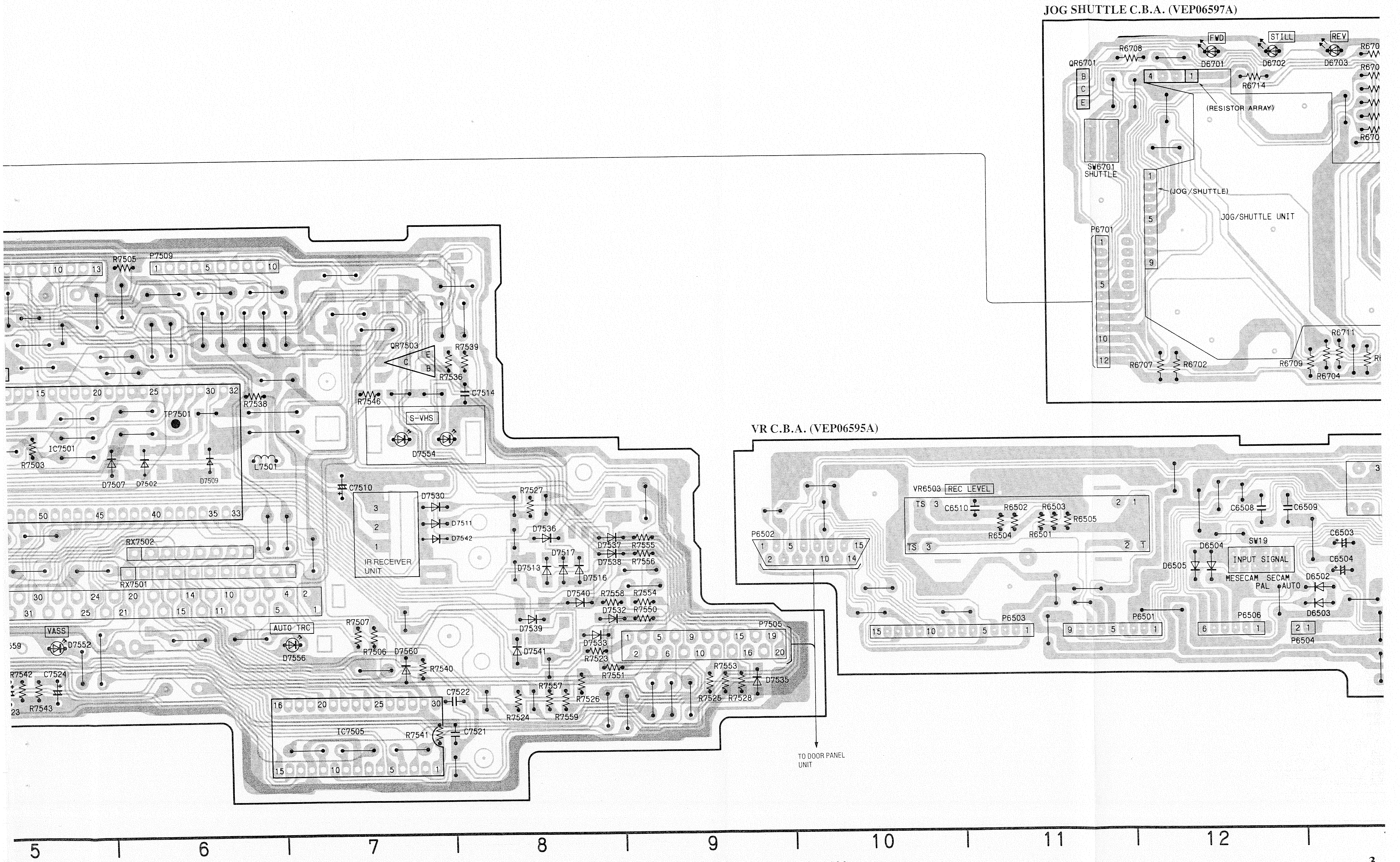
12 13 14 15 16 17 18 19 20 21 22

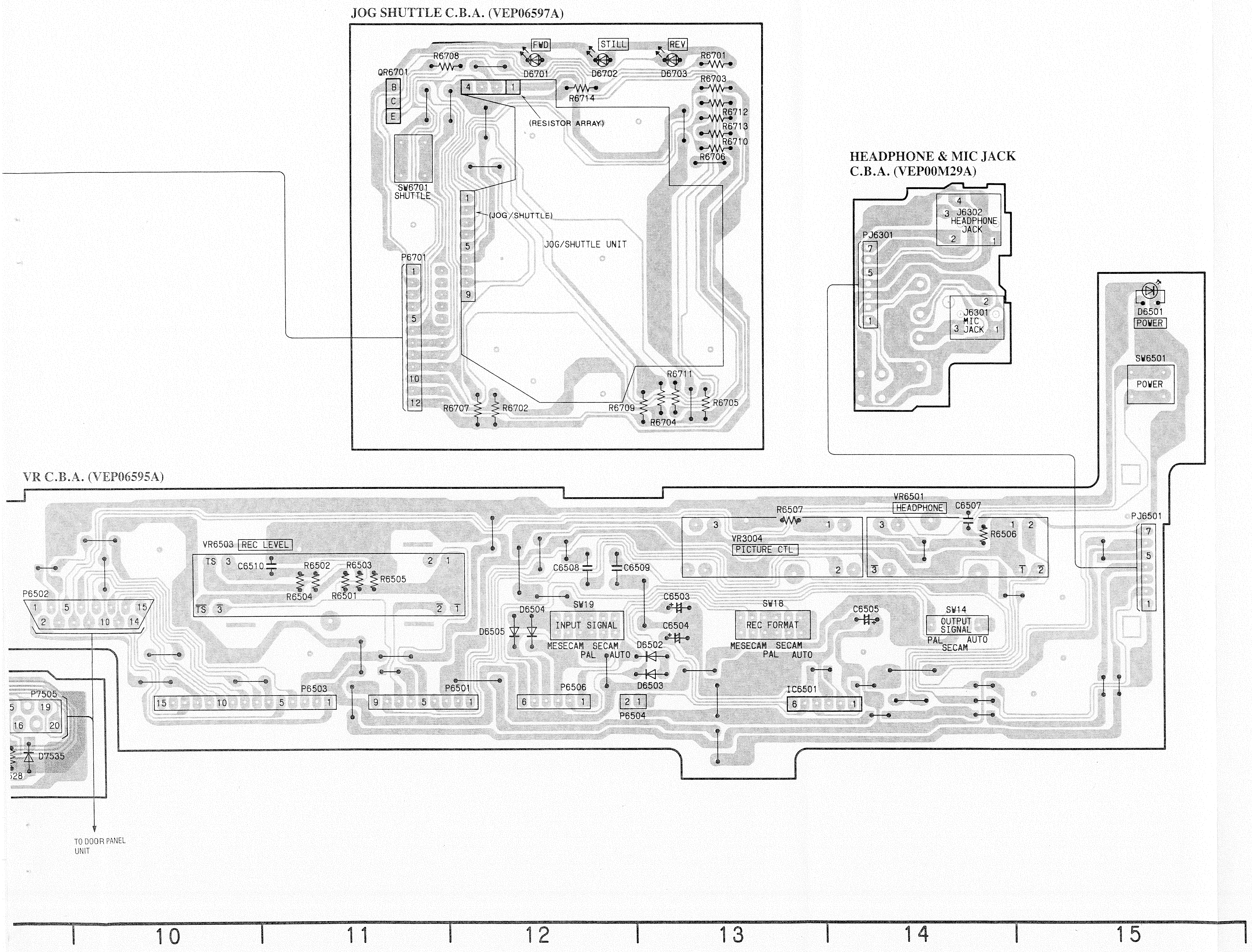
3-42. TIMER C.B.A. (VEP07530H) & VR C.B.A. (VEP06595A)


TIMER C.B.A. (VEP07530H)
E
D
C
B
A
1
2
3
4
5
6
7
8
P7506
P7503
P7511
P7501
P7502
P7509
P7507
R7534
R7547
R7505
R7533
R7531
R7512
R7508
R7509
R7511
R7514
R7513
R7532
R7510
R7544
R7502
R7501
R7503
R7504
R7552
R7529
R7542
R7543
R7539
R7536
R7538
R7546
R7527
R7507
R7506
R7540
R7541
R7524
TP7517
TP7519
TP7518
TP7501
QR7501
QR7502
QR7503
QR7505
QR7510
QR7511
Q7501
IC7501
IC7502
IC7503
IC7504
IC7505
C7501
C7502
C7503
C7504
C7505
C7506
C7507
C7508
C7509
C7510
C7511
C7512
C7513
C7514
C7520
C7521
C7522
C7523
C7524
C7525
X7501
X7502
L7501
D7501
D7502
D7507
D7509
D7511
D7513
D7530
D7534
D7539
D7541
D7542
D7551
D7552
D7553
D7554
D7555
D7556
D7557
D7559
D7560
D7563
D7564
DP7501
RX7501
RX7502
TIMER CLOCK
SECAM
PAL
MESECAM
SIMUL
S-VHS
INSERT
A.DUB
RENUM
VASS
AUTO TRC
IR RECEIVER UNIT

JOG SHUTTLE C.B.A. (VEP06597A)

VR C.B.A. (VEP06595A)


FWD
STILL
REV
R6708
QR6701
B
C
E
D6701
D6702
D6703
R6714
(RESISTOR ARRAY)
SW6701
SHUTTLE
(JOG/SHUTTLE)
JOG/SHUTTLE UNIT
P6701
R6711
R6707
R6702
R6709
R6704
R7505
P7509
QR7503
R7539
R7536
C7514
R7546
R7538
TP7501
S-VHS
D7554
IC7501
R7503
D7507
D7502
D7509
L7501
C7510
D7530
D7511
D7542
IR RECEIVER
UNIT
R7527
D7536
D7517
D7513
D7516
D7537
D7538
R7555
R7556
D7540
R7558
R7554
D7532
R7550
RX7502
RX7501
VASS
D7552
AUTO TRC
D7556
R7507
R7506
D7560
R7540
D7539
D7541
D7533
R7523
R7551
P7505
R7553
D7535
R7525
R7528
R7542
C7524
R7543
C7522
R7557
R7526
R7524
R7559
IC7505
R7541
C7521
P6502
VR6503
REC LEVEL
TS
C6510
R6502
R6503
R6505
R6504
R6501
C6508
C6509
C6503
C6504
D6504
SW19
INPUT SIGNAL
MESECAM
SECAM
PAL
AUTO
D6505
D6502
D6503
P6503
P6501
P6506
P6504
TO DOOR PANEL
UNIT
5
6
7
8
9
10
11
12

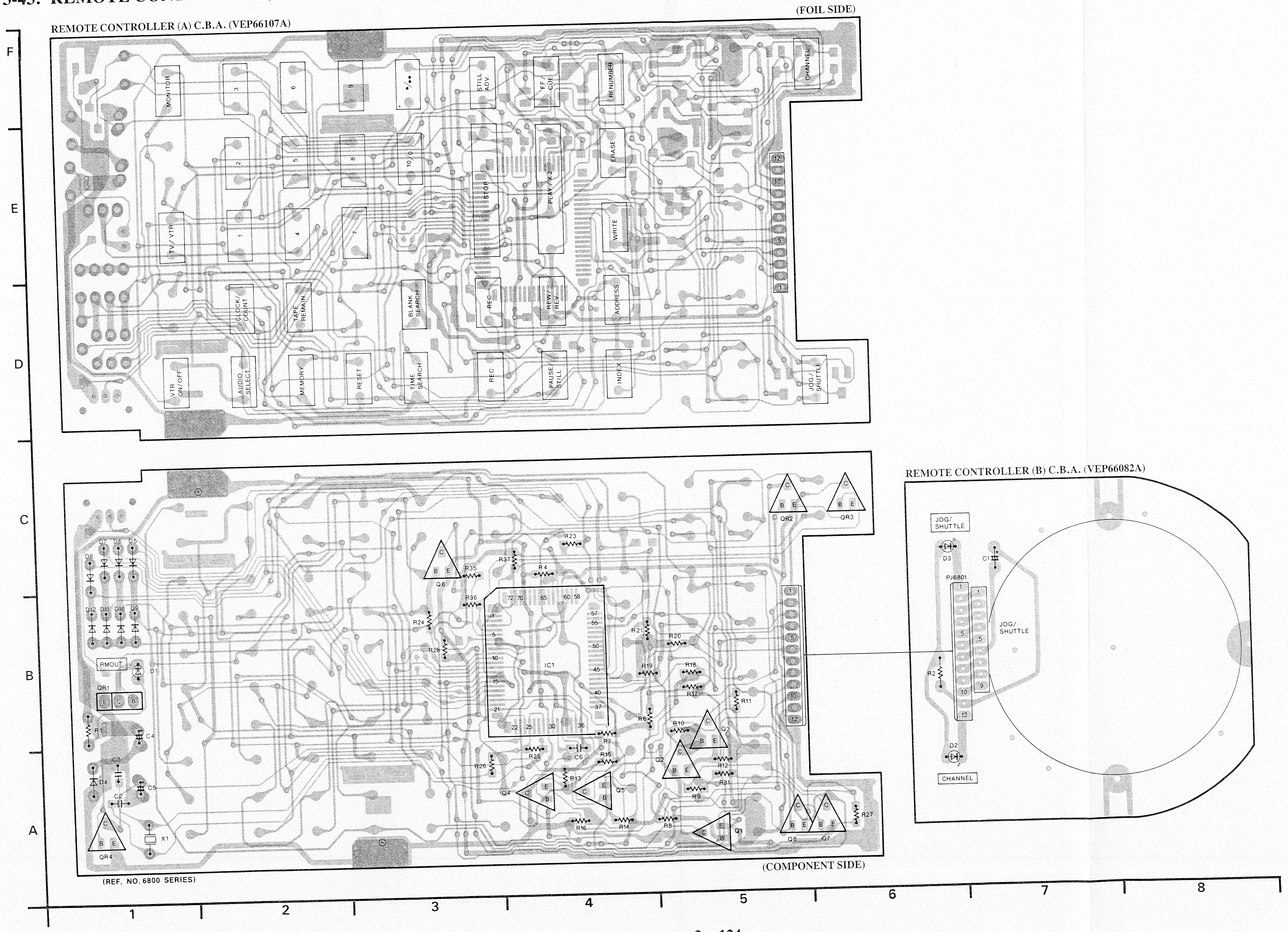

JOG SHUTTLE C.B.A. (VEP06597A)
FWD
STILL
REV
R6708
D6701
D6702
D6703
R6701
R6703
QR6701
B
C
E
4
1
R6714
(RESISTOR ARRAY)
R6712
R6713
R6710
R6706
SW6701
SHUTTLE
(JOG/SHUTTLE)
JOG/SHUTTLE UNIT
P6701
5
9
10
12
R6711
R6707
R6702
R6709
R6704
R6705
HEADPHONE & MIC JACK
C.B.A. (VEP00M29A)
J6302
HEADPHONE
JACK
PJ6301
7
J6301
MIC
JACK
D6501
POWER
SW6501
POWER
VR C.B.A. (VEP06595A)
R6507
VR6501
HEADPHONE
C6507
PJ6501
R6506
VR3004
PICTURE CTL
VR6503
REC LEVEL
TS
C6510
R6502
R6503
R6505
R6504
R6501
C6508
C6509
P6502
15
14
C6503
D6504
SW19
C6505
SW18
SW14
D6505
INPUT SIGNAL
C6504
REC FORMAT
OUTPUT
SIGNAL
MESECAM
SECAM
PAL
AUTO
D6502
D6503
P7505
19
16
20
D7535
P6503
P6501
P6506
P6504
IC6501
6
TO DOOR PANEL
UNIT
10
11
12
13
14
15

TIMER & VR C.B.A.	
Transistor	
Q7501	C-2
Transistor & Resistor	
QR6701	E-11
QR7501	C-2
QR7502	B-2
QR7503	C-7
QR7505	A-4
QR7510	A-4
QR7511	A-5
Integrated Circuit	
IC6501	B-13
IC7501	C-5
IC7502	C-2
IC7503	C-5
IC7504	C-2
IC7505	A-7
Test Point	
TP7501	C-6
TP7517	C-2
TP7518	B-2
TP7519	C-2
Adjustment	
C7501	C-3
VR3004	B-13
VR6501	C-14
VR6503	B-10
Connector	
P6501	B-12
P6503	B-11
P6504	B-13
P6506	B-12
P6701	D-11
P7501	D-4
P7502	D-5
P7503	D-2
P7505	B-9
P7506	D-1
P7507	C-1
P7509	D-6
P7511	D-3
PJ6301	D-14
PJ6501	C-15

ADDRESS INFORMATION

Next Page:
REMOTE CONTROLLER Section

3-43. REMOTE CONTROLLER (A) C.B.A. (VEP66107A) & REMOTE CONTROLLER (B) C.B.A. (VEP66082A)


REMOTE CONTROLLER (A) C.B.A. (VEP66107A)

(FOIL SIDE)

(COMPONENT SIDE)

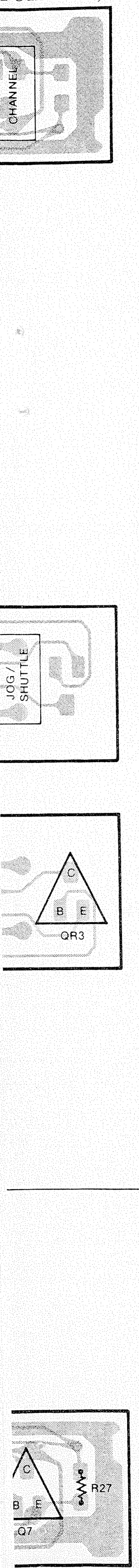
(REF. NO. 6800 SERIES)

REMOTE CONTROLLER (B) C.B.A. (VEP66082A)

F
E
D
C
B
A
1
2
3
4
5
6
7
8
MONITOR
3
6
9
•/••
STILL ADV.
FF/CUE
RENUMBER
CHANNEL
2
5
8
10/0
STOP
PLAY/×2
ERASE
TV/VTR
1
4
7
WRITE
CLOCK/COUNT
TAPE REMAIN
BLANK SEARCH
REC
REW/REV
ADDRESS
VTR ON/OFF
AUDIO SELECT
MEMORY
RESET
TIME SEARCH
REC
PAUSE/STILL
INDEX
JOG/SHUTTLE
QR2
QR3
Q6
R35
R37
R23
R4
R36
R24
R28
IC1
R21
R20
R19
R18
R17
R11
R6
R10
Q3
Q2
R7
R25
C6
R15
R12
R31
R26
R13
Q4
Q5
R9
R16
R14
R8
Q1
Q8
Q7
R27
D8
D7
D6
D5
D12
D11
D10
D9
RMOUT
D1
QR1
R1
C4
C3
D4
C2
C5
QR4
X1
JOG/SHUTTLE
D3
C1
PJ6801
R2
D2
CHANNEL

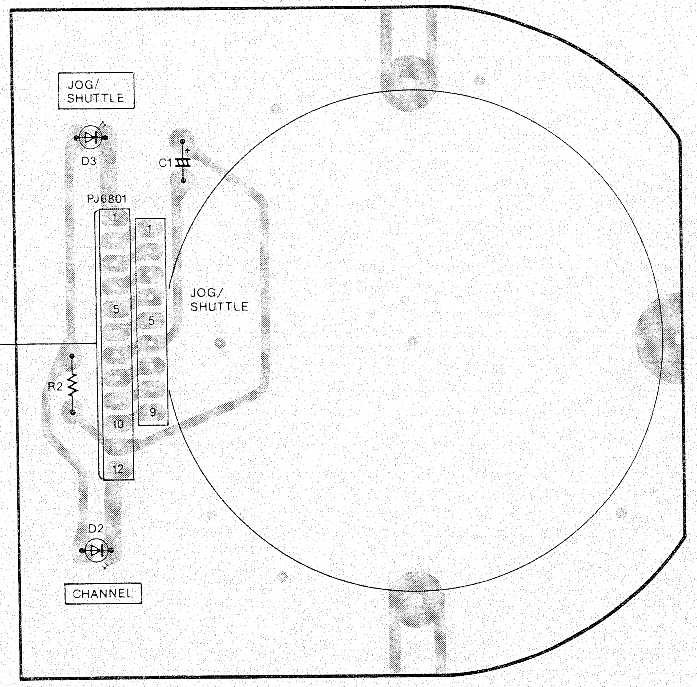
VEP66082A)

FOIL SIDE)


CHANNEL
JOG/SHUTTLE
C
B E
QR3
C
B E
R27
Q7

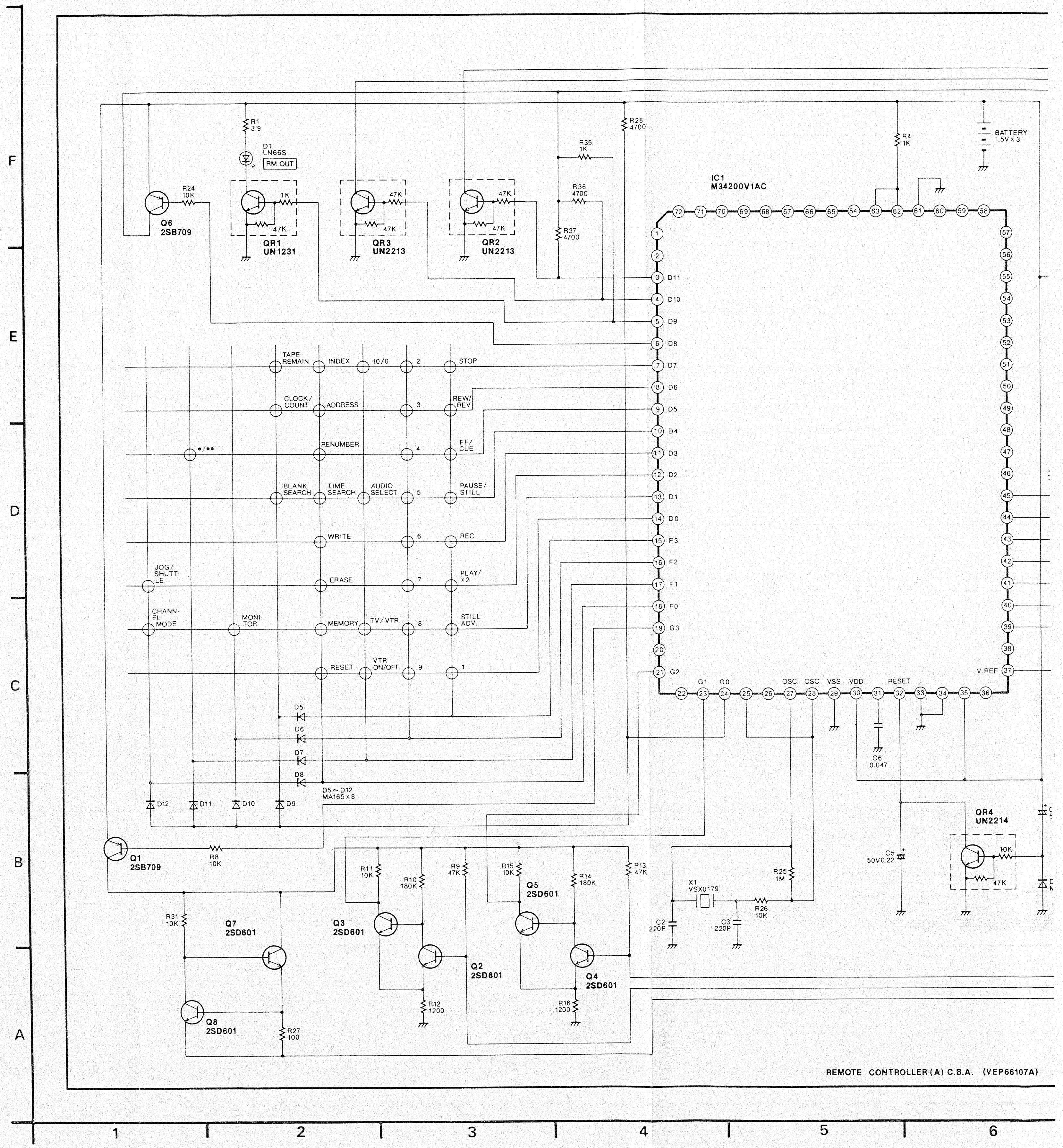
NT SIDE)

REMOTE CONTROLLER (B) C.B.A. (VEP66082A)

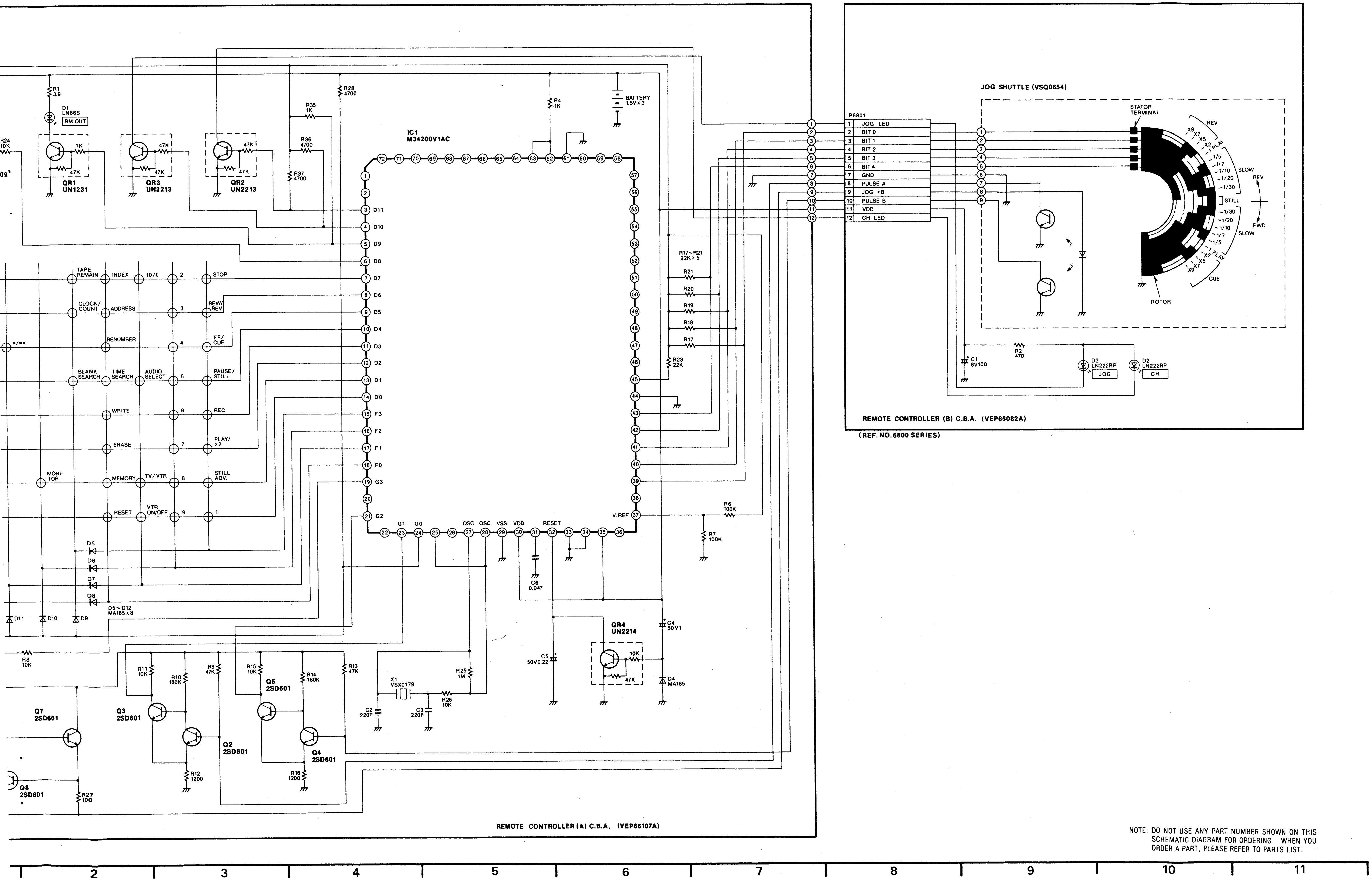

JOG/SHUTTLE
D3
C1
PJ6801
1
5
10
12
1
5
9
JOG/SHUTTLE
R2
D2
CHANNEL

6
7
8

3-44. REMOTE CONTROLLER SCHEMATIC DIAGRAM
—UNIT NO.: VEQ1069—


F
E
D
C
B
A
R1 3.9
D1 LN66S
RM OUT
R28 4700
R4 1K
BATTERY 1.5V x 3
R35 1K
R36 4700
R37 4700
IC1
M34200V1AC
Q6 2SB709
R24 10K
QR1 UN1231
QR3 UN2213
QR2 UN2213
1K
47K
D11
D10
D9
D8
D7
D6
D5
D4
D3
D2
D1
D0
F3
F2
F1
F0
G3
G2
G1
G0
OSC
OSC
VSS
VDD
RESET
V.REF
TAPE REMAIN
INDEX
10/0
2
STOP
CLOCK/COUNT
ADDRESS
3
REW/REV
●/●●
RENUMBER
4
FF/CUE
BLANK SEARCH
TIME SEARCH
AUDIO SELECT
5
PAUSE/STILL
WRITE
6
REC
JOG/SHUTTLE
ERASE
7
PLAY/x2
CHANNEL MODE
MONITOR
MEMORY
TV/VTR
8
STILL ADV.
RESET
VTR ON/OFF
9
1
D5
D6
D7
D8
D5 ~ D12 MA165 x 8
D12
D11
D10
D9
C6 0.047
QR4 UN2214
10K
47K
C5 50V0.22
Q1 2SB709
R8 10K
R11 10K
R10 180K
R9 47K
R15 10K
R14 180K
R13 47K
Q5 2SD601
X1 VSX0179
R25 1M
R26 10K
C2 220P
C3 220P
R31 10K
Q7 2SD601
Q3 2SD601
Q2 2SD601
Q4 2SD601
R12 1200
R16 1200
Q8 2SD601
R27 100
REMOTE CONTROLLER (A) C.B.A. (VEP66107A)
1
2
3
4
5
6

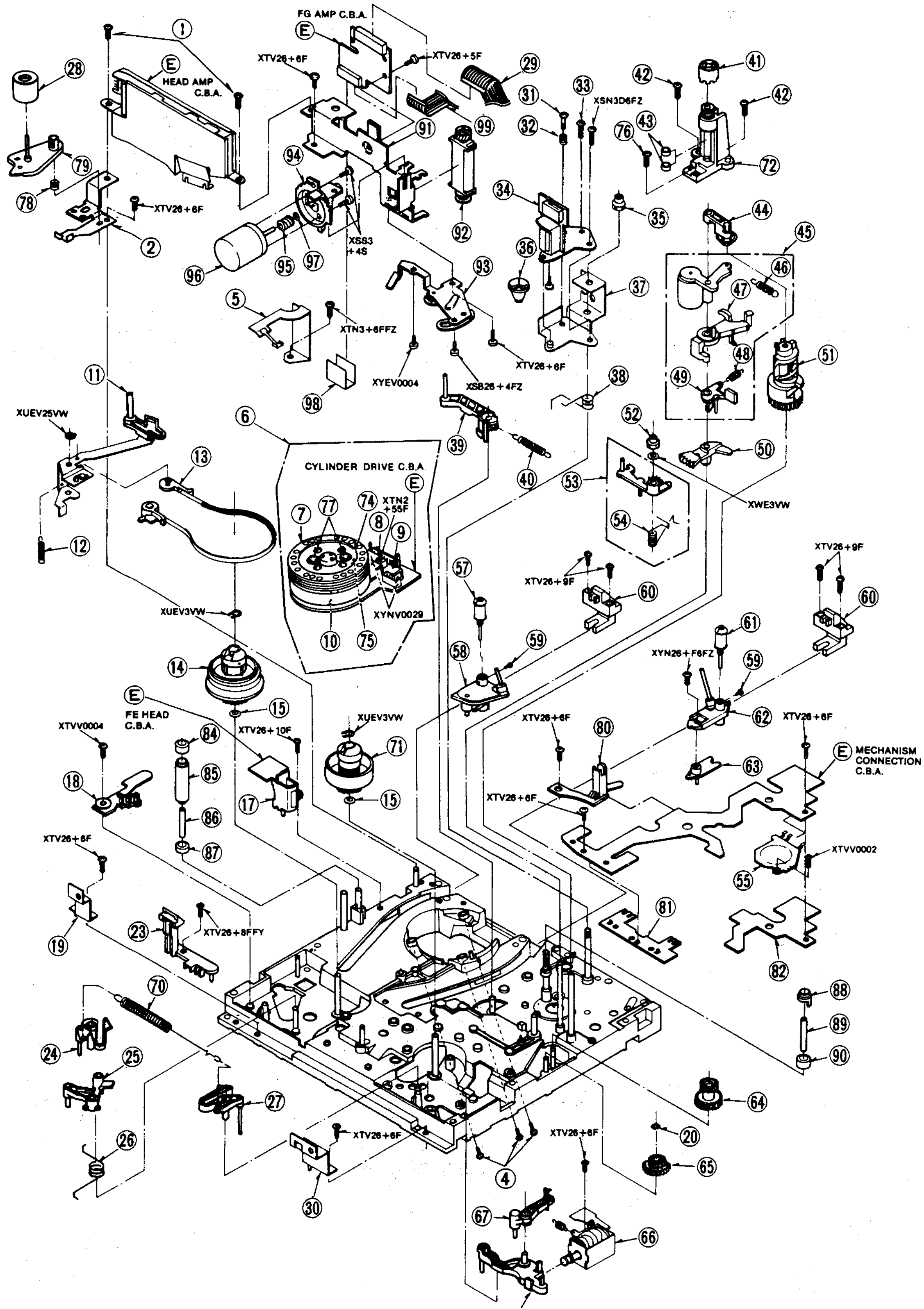
CONTROLLER SCHEMATIC DIAGRAM
.: VEQ1069—


R1
3.9
D1
LN66S
RM OUT
R24
10K
QR1
UN1231
1K
47K
QR3
UN2213
47K
QR2
UN2213
R35
1K
R36
4700
R37
4700
R28
4700
R4
1K
BATTERY
1.5V x 3
IC1
M34200V1AC
D11
D10
D9
D8
D7
D6
D5
D4
D3
D2
D1
D0
F3
F2
F1
F0
G3
G2
G1
G0
OSC
OSC
VSS
VDD
RESET
V.REF
TAPE REMAIN
INDEX
10/0
2
STOP
CLOCK/COUNT
ADDRESS
3
REW/REV
RENUMBER
4
FF/CUE
BLANK SEARCH
TIME SEARCH
AUDIO SELECT
5
PAUSE/STILL
WRITE
6
REC
ERASE
7
PLAY/x2
MONI-TOR
MEMORY
TV/VTR
8
STILL ADV.
RESET
VTR ON/OFF
9
1
D5
D6
D7
D8
D5~D12
MA165 x 8
D11
D10
D9
R17~R21
22K x 5
R21
R20
R19
R18
R17
R23
22K
R6
100K
R7
100K
C6
0.047
QR4
UN2214
10K
47K
C4
50V1
D4
MA165
C5
50V0.22
R8
10K
Q7
2SD601
R11
10K
R10
180K
R9
47K
R15
10K
R14
180K
R13
47K
Q5
2SD601
Q3
2SD601
Q2
2SD601
Q4
2SD601
R12
1200
R16
1200
Q8
2SD601
R27
100
X1
VSX0179
C2
220P
C3
220P
R26
10K
R25
1M
REMOTE CONTROLLER (A) C.B.A. (VEP66107A)
P6801
1 JOG LED
2 BIT 0
3 BIT 1
4 BIT 2
5 BIT 3
6 BIT 4
7 GND
8 PULSE A
9 JOG +B
10 PULSE B
11 VDD
12 CH LED
JOG SHUTTLE (VSQ0654)
STATOR TERMINAL
REV
X9
X7
X5
X2
PLAY
1/5
1/7
1/10
1/20
1/30
SLOW
REV
STILL
FWD
SLOW
CUE
ROTOR
C1
6V100
R2
470
D3
LN222RP
JOG
D2
LN222RP
CH
REMOTE CONTROLLER (B) C.B.A. (VEP66082A)
(REF. NO. 6800 SERIES)
1
2
3
4
5
6
7
8
9
10
11

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

SECTION 4
EXPLODED VIEWS & PARTS LIST

4-1. EXPLODED VIEW ❶ CHASSIS PARTS SECTION (1)



FG AMP C.B.A.
E
HEAD AMP C.B.A.
CYLINDER DRIVE C.B.A.
FE HEAD C.B.A.
MECHANISM CONNECTION C.B.A.
XTV26+6F
XTV26+5F
XSN3D6FZ
XSS3 +4S
XTN3+6FFZ
XYEV0004
XSB26+4FZ
XUEV25VW
XTN2 +55F
XYNV0029
XUEV3VW
XWE3VW
XTV26+9F
XYN26+F6FZ
XTVV0004
XTV26+10F
XTVV0002
XTV26+8FFY
①
②
④
⑤
⑥
⑦
⑧
⑨
⑩
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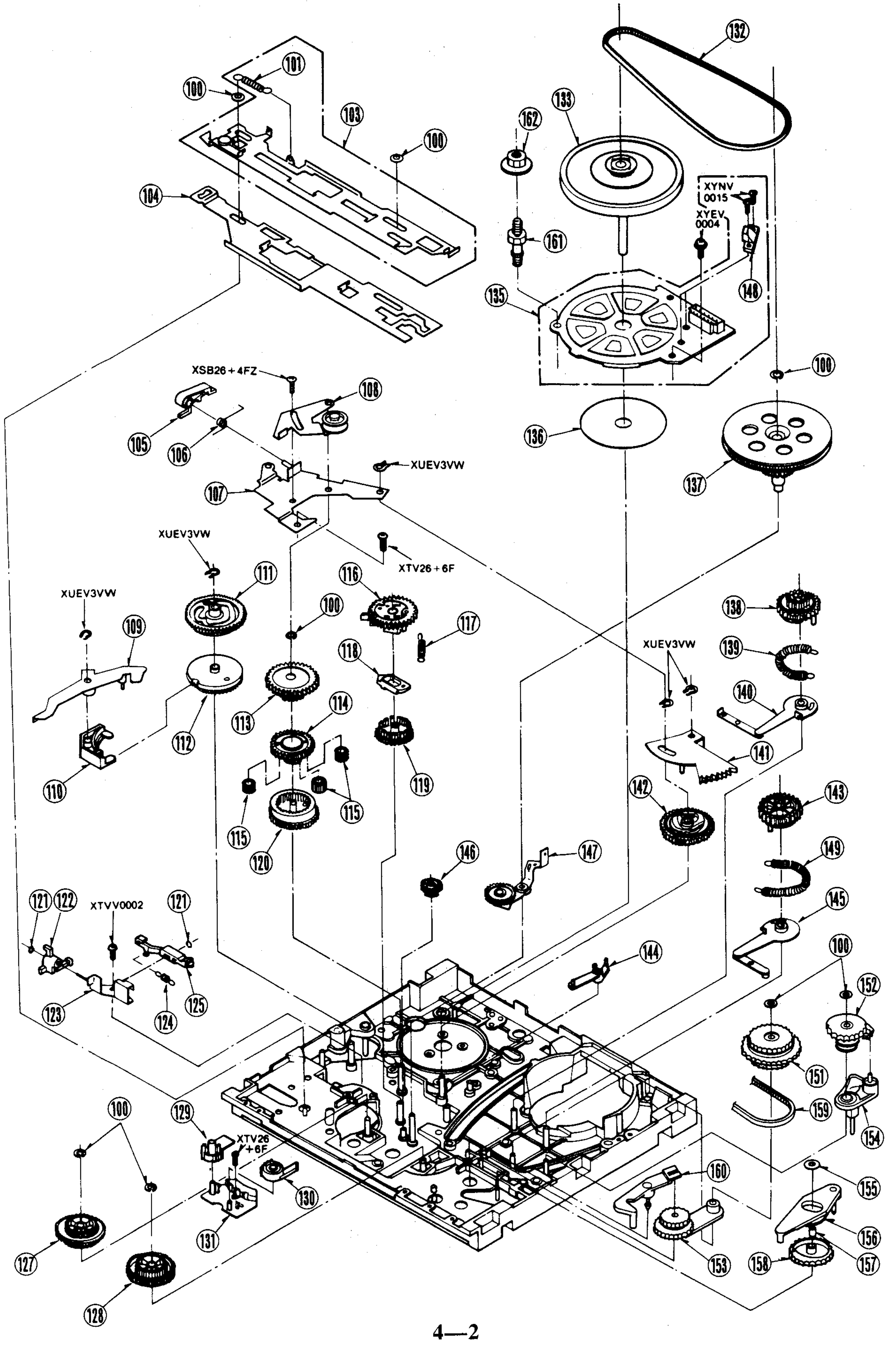
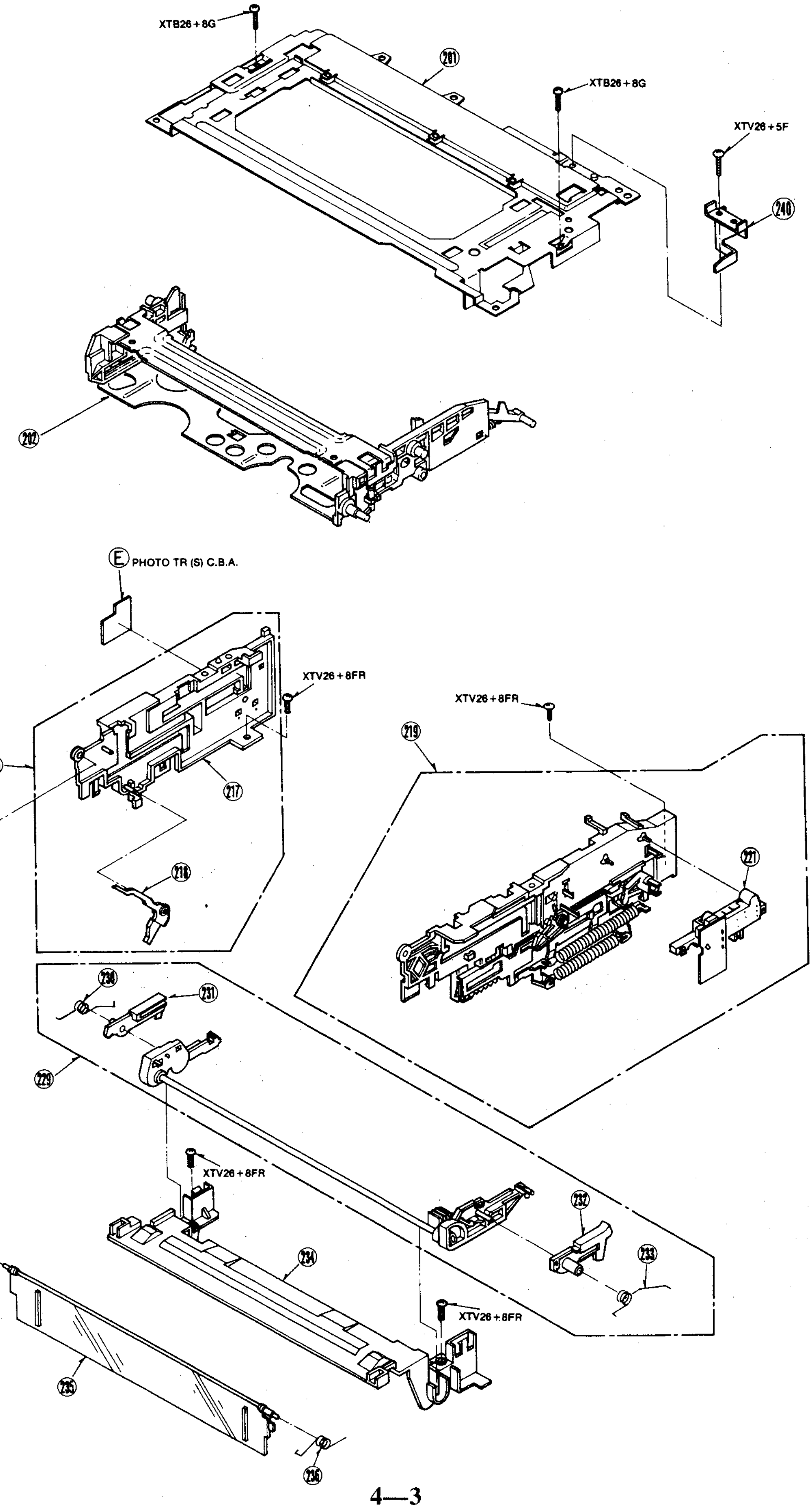
(96)
(97)
(98)
(99)

❷ CHASSIS PARTS SECTION (2)



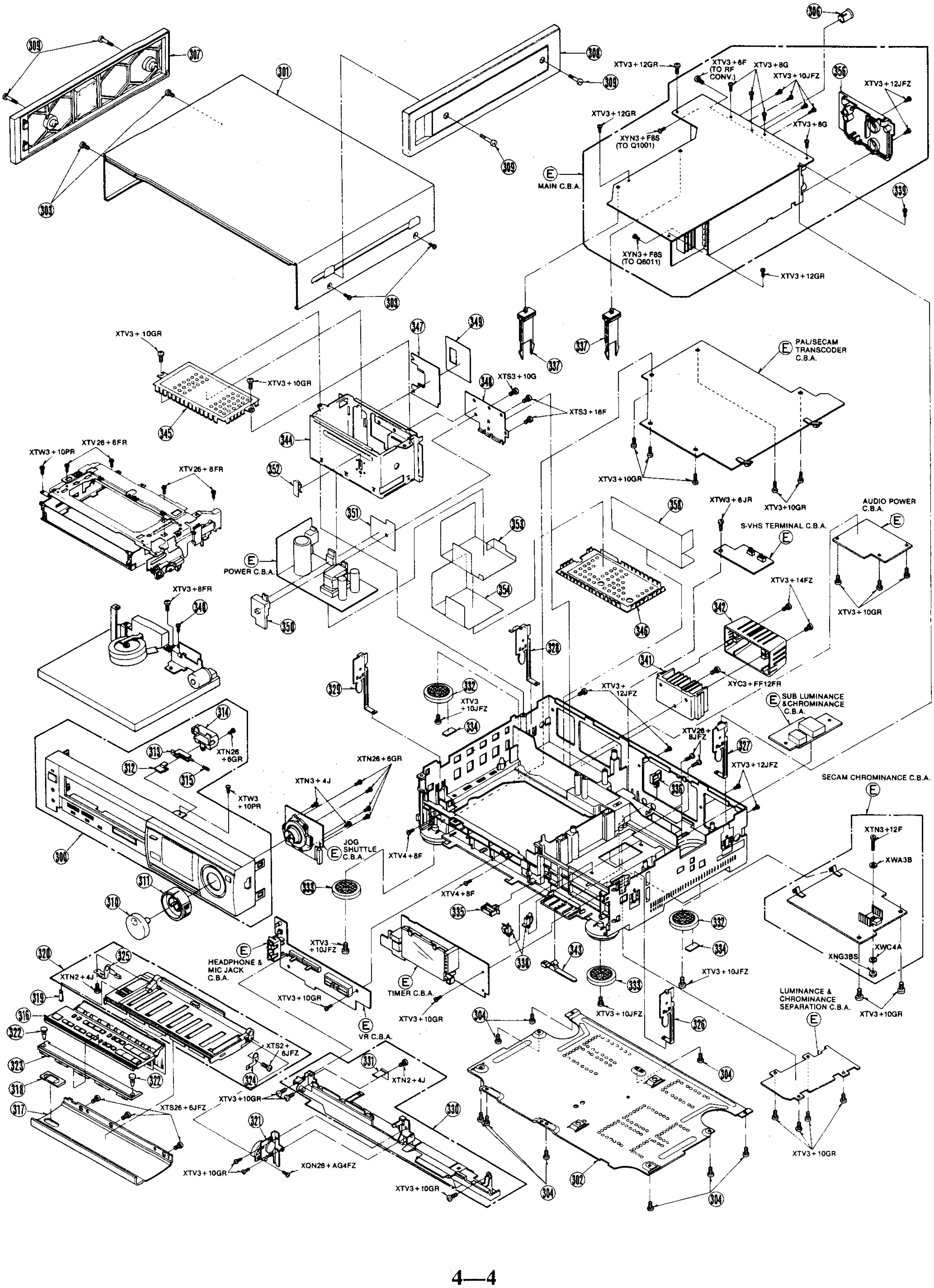
132
101
100
103
100
162
133
XYNV 0015
XYEV 0004
104
161
148
135
100
XSB26+4FZ
108
105
106
XUEV3VW
136
137
107
XUEV3VW
XTV26+6F
111
116
XUEV3VW
100
117
109
138
118
XUEV3VW
139
140
113
114
112
141
110
119
115
115
142
143
120
146
147
149
121
122
XTVV0002
121
145
144
100
152
123
125
124
151
100
129
XTV26 +6F
159
154
155
160
130
131
127
153
156
158
157
128

❸ CASSETTE UP MECHANISM SECTION



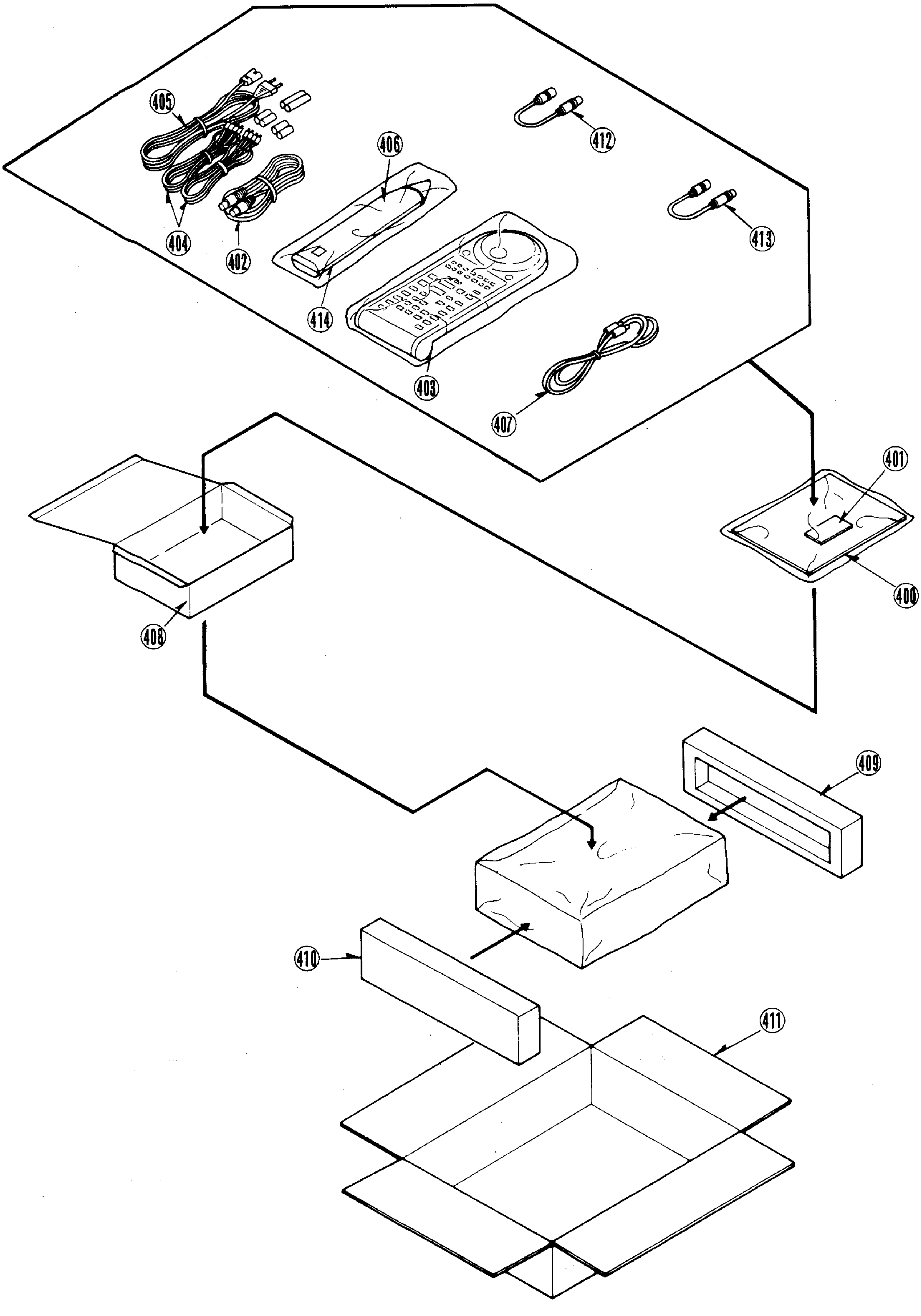
XTB26+8G
201
XTB26+8G
XTV26+5F
240
202
E PHOTO TR (S) C.B.A.
XTV26+8FR
XTV26+8FR
219
216
217
218
221
230
231
229
XTV26+8FR
232
234
233
XTV26+8FR
235
236

❹ CASING PARTS SECTION

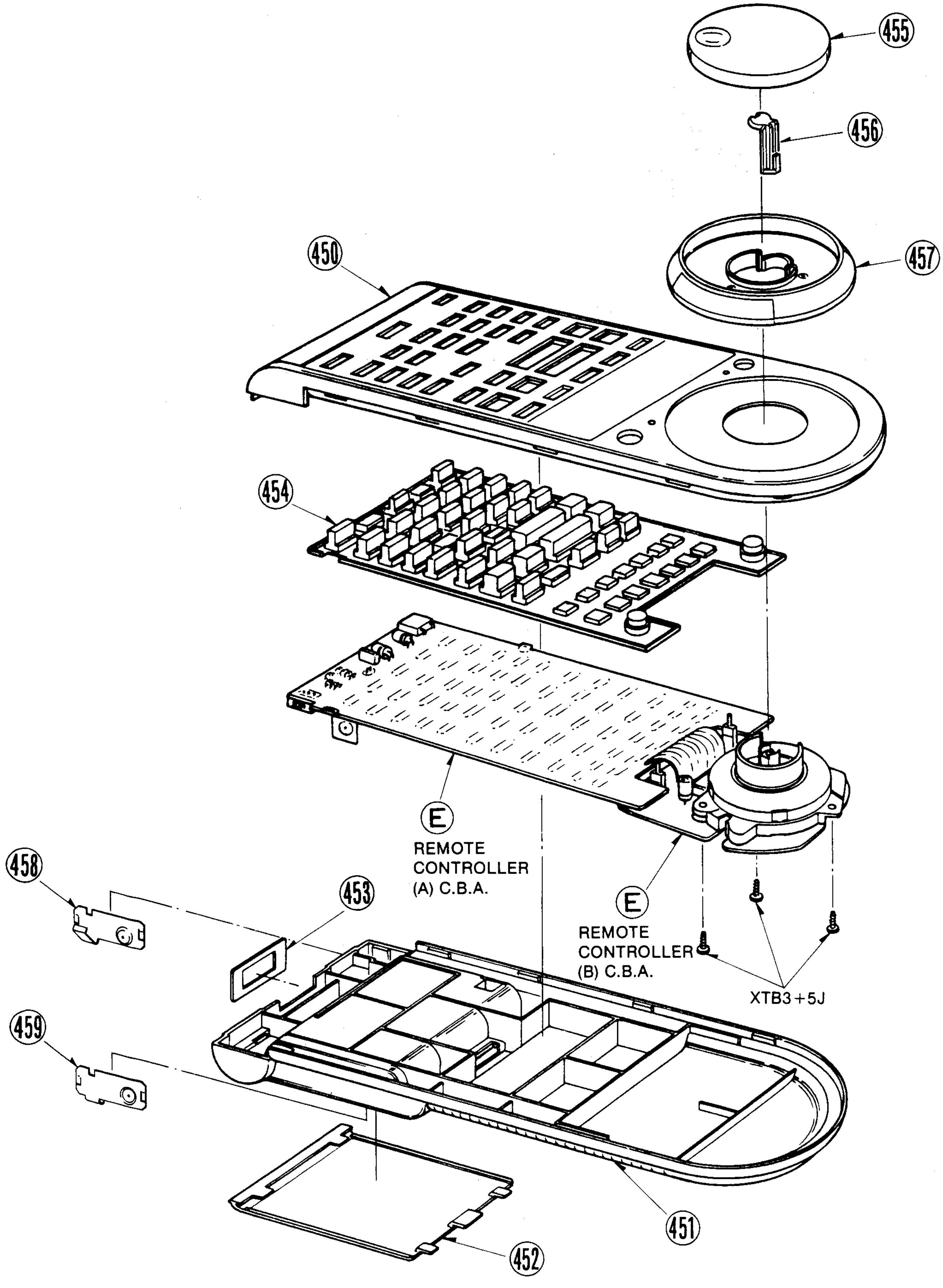


306
309
307
301
308
XTV3+12GR
XTV3+6F (TO RF CONV.)
XTV3+8G
XTV3+10JFZ
356
XTV3+12JFZ
309
XTV3+12GR
XYN3+F8S (TO Q1001)
XTV3+8G
303
309
E
MAIN C.B.A.
339
XYN3+F8S (TO Q6011)
XTV3+12GR
303
XTV3+10GR
347
349
XTV3+10GR
348
XTS3+10G
XTS3+16F
337
337
E
PAL/SECAM TRANSCODER C.B.A.
345
344
XTW3+10PR
XTV26+8FR
XTV26+8FR
352
XTV3+10GR
XTV3+10GR
XTW3+6JR
358
AUDIO POWER C.B.A.
E
351
353
S-VHS TERMINAL C.B.A.
E
E
POWER C.B.A.
354
XTV3+14FZ
XTV3+10GR
XTV3+8FR
340
350
346
342
328
341
XYC3+FF12FR
332
XTV3 +10JFZ
329
XTV3+12JFZ
E
SUB LUMINANCE &CHROMINANCE C.B.A.
334
314
XTV26+8JFZ
327
313
XTN26 +6GR
XTN26+6GR
XTV3+12JFZ
312
315
XTN3+4J
SECAM CHROMINANCE C.B.A.
E
XTW3 +10PR
336
XTN3+12F
XWA3B
300
JOG SHUTTLE C.B.A.
E
XTV4+8F
311
333
XTV4+8F
310
335
332
E
HEADPHONE & MIC JACK C.B.A.
XTV3 +10JFZ
334
XWC4A
XNG3BS
320
325
XTN2+4J
338
343
333
XTV3+10JFZ
319
E
TIMER C.B.A.
XTV3+10GR
XTV3+10JFZ
LUMINANCE & CHROMINANCE SEPARATION C.B.A.
E
XTV3+10GR
316
XTV3+10GR
304
326
E
VR C.B.A.
322
XTS2+6JFZ
323
331
XTN2+4J
304
322
318
324
XTV3+10GR
XTS26+6JFZ
317
330
321
XTV3+10GR
XQN26+AG4FZ
XTV3+10GR
302
304
304
XTV3+10GR

❺ PACKING PARTS SECTION


405
406
412
404
402
413
414
403
407
401
400
408
409
410
411

❻ REMOTE CONTROLLER UNIT


455
456
457
450
454
E
REMOTE
CONTROLLER
(A) C.B.A.
E
REMOTE
CONTROLLER
(B) C.B.A.
XTB3+5J
458
453
459
451
452

4-2. MECHANICAL REPLACEMENT PARTS LIST

Note:1.* Be sure to make your orders of replacement parts according to this list.
2.IMPORTANT SAFETY NOTICE
Components identified with the mark <!> have the special characteristics for safety. When replacing any of these components,use only the same type.

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
1(1)		VHD0418	HEAD AMP SET SCREW	2	
2(1)		VMA7174	HEAD AMP MOUNT ANGLE	1	
4(1)		VHD0342	CYLINDER SCREW	3	
5(1)		VXA2702	EARTH PLATE UNIT	1	
6(1)		VEG0736	CYLINDER UNIT	1	<!>
7(1)		VEH0454	UPPER CYLINDER UNIT	1	
8(1)		VRH0017	HEATER	1	
9(1)		VMA8089	MAIN HOLDER	1	
10(1)		VSC2188	CYLINDER C.B.A.SHIELD PLATE	1	
11(1)		VXL1855	TENSION ARM (1) UNIT	1	
12(1)		VMB1563	TENSION SPRING	1	
13(1)		VXZ0267	TENSION BAND UNIT	1	
14(1)		VXR0179	SUPPLY REEL TABLE UNIT	1	
15(1)		VMX1171	REEL WASHER (0.5mm)	2	
15(1)		VMX1239	REEL WASHER (0.3mm)	2	
15(1)		VMX1238	REEL WASHER (0.2mm)	2	
17(1)		VBS0038	FE HEAD	1	
18(1)		VMD1316	TENSION SPRING HOOK	1	
19(1)		VMA6895	MOUNT ANGLE (L)	1	
20(1)		VMX1079	CUT WASHER	1	
23(1)		VES0486	SAFETY SW	1	
24(1)		VXZ0259	SUPPLY MAIN BRAKE UNIT	1	
25(1)		VXZ0274	SUPPLY SOFT BRAKE(1)UNIT	1	
26(1)		VMB1564	SUPPLY SOFT BRAKE SPRING	1	
27(1)		VXZ0262	TAKE UP MAIN BRAKE UNIT	1	
28(1)		VXP1092	IMPEDANCE ROLLER UNIT	1	
29(1)		VWJ0392	FLEXIBLE CABLE(18P)	1	
30(1)		VMA6896	MOUNT ANGLE (R)	1	
31(1)		VHD0322	ADJUST SCREW	1	
32(1)		VMB1251	ADJUST SPRING	1	
33(1)		VHD0089B	AZIMUTH ADJUST SCREW	1	
34(1)		VED0082	A/C HEAD (1) UNIT	1	
35(1)		VHN0063	M4 NYLON NUT	1	
36(1)		VHN0110	ADJUST NUT	1	
37(1)		VMA7831	HEAD BASE	1	
38(1)		VMB1567	A/C HEAD SPRING	1	
39(1)		VXL1857	SUB LOADING ARM (1) UNIT	1	
40(1)		VMB1566	SUB POST SPRING	1	
41(1)		VXQ0006	THRUST SCREW UNIT	1	
42(1)		VHD0317	HOUSING SCREW	2	
43(1)		VMX1033	OIL SEAL	2	
44(1)		VMX1353	PINCH CAM CAP	1	
45(1)		VXL1858	PRESSURE ROLLER UNIT	1	
46(1)		VMB1941	PIN PRESSURE SPRING	1	
47(1)		VML2232	PINCH PRESSURE ARM	1	
48(1)		VMB1569	PINCH PRESSURE ARM RELEASE SPRING	1	
49(1)		VML1874	PINCH LIFT ARM	1	
50(1)		VDG0597	P5 PULL OUT SECTOR GEAR	1	
51(1)		VDG0421	PINCH CAM	1	
52(1)		VHD0045	M3 NYLON NUT	1	
53(1)		VXL2027	P5 UNIT	1	
54(1)		VMB2718	P5 SPRING	1	
55(1)		VSS0175	MODE SW	1	
57(1)		VXP1093	ROLLER POST (S) UNIT	1	
58(1)		VXA4106	INCLIND BASE (S)(1)UNIT	1	
59(1)		VHD0133	ROLLER POST SCREW	2	
60(1)		VMD0910	POST STOPPER	2	
61(1)		VXP1094	ROLLER POST (T) UNIT	1	
62(1)		VXA3876	INCLIND BASE(T)(1)UNIT	1	
63(1)		VXA2687	INCLIND ADJUST PLATE UNIT	1	
64(1)		VDG0483	PINCH SPEED DOWN GEAR	1	
65(1)		VDG0664	CONNECTION GEAR	1	
66(1)		VEK3347	SOLENOID UNIT	1	
67(1)		VXA2692	KICK ROD UNIT	1	
68(1)		VML2048	SOLENOID LEVER	1	
70(1)		VMB2012	MAIN BRAKE SPRING	1	
71(1)		VXR0176	TAKE UP REEL TABLE UNIT	1	
72(1)		VXD0101	HOUSING UNIT	1	
74(1)		VSC1843	HEAT SINK PLATE	1	
75(1)		VHD0329	HEAT SINK SCREW	1	
76(1)		VHD0374	HOUSING SCREW	1	
77(1)		VHD0686	UPPER CYLINDER SCREW	2	
78(1)		VMB1741	IMPEDANCE ARM SPRING	1	
79(1)		VML2308	IMPEDANCE ROLLER ARM	1	
80(1)		VXA3520	LED HOLDER UNIT	1	
81(1)		VMA7829	REINFORCEMENT PLATE (F)	1	
82(1)		VMA7830	REINFORCEMENT PLATE (R)	1	
84(1)		VMX1088	SUPPLY UPPER LIMITER	1	
85(1)		VDP1304	SUPPLY ROLLER	1	
86(1)		VMX1581	P1 COLLAR	1	
87(1)		VMX1533	SUPPLY LOWER LIMITER	1	
88(1)		VMX1544	P4 UPPER LIMITER	1	
89(1)		VMX1568	P4 SLEEVE	1	
90(1)		VMX1534	P4 LOWER LIMITER	1	
91(1)		VMA7832	MOTOR MOUNT PLATE UNIT	1	
92(1)		VXA3517	WORM WHEEL BEARING UNIT	1	
93(1)		VXA4315	TENSION PULLEY BASE (A) UNIT	1	
94(1)		VXA3564	REEL MOTOR BRACKET UNIT	1	
95(1)		VXP1208	WORM GEAR UNIT	1	
96(1)		VEM0320	REV MOTOR	1	<!>
97(1)		VMX1734	WORM WASHER	1	
98(1)		VWJ15TW060MM	FLEXIBLE CADE	1	
99(1)		VWJ0357	FLEXIBLE CADE(15P)	1	
100(2)		VMX1079	CUT WASHER	8	
101(2)		VMB1883	SUB LEVER SPRING	1	
103(2)		VXA3510	SUB LEVER UNIT	1	
104(2)		VMM0204	MAIN LEVER	1	
105(2)		VXL2088	SS BRAKE ARM UNIT	1	
106(2)		VMB1588	SS BRAKE SPRING	1	
107(2)		VXA3512	SS BRAKE BASE (1) UNIT	1	
108(2)		VXA3516	TENSION ROLLER UNIT	1	
109(2)		VXL1632	CAM FOLLOWER ARM UNIT	1	
110(2)		VML1861	DETENT ARM	1	
111(2)		VDG0574	MAIN CAM GEAR	1	
112(2)		VDG0343	SUB CAM GEAR	1	
113(2)		VDG0348	CENTRE GEAR	1	
114(2)		VDG0422	RETAINER GEAR	1	
115(2)		VDG0345	PLANET GEAR	3	
116(2)		VDG0547	CLUTCH DISK	1	
117(2)		VMB1558	CLUTCH SPRING	1	
118(2)		VDG0350	LOCK SLIDE GEAR	1	
119(2)		VDG0335	DRIVE DISK	1	
120(2)		VDG0342	RING GEAR	1	
121(2)		VMX0967	CUT WASHER	2	
122(2)		VML1859	CHANGE LEVER	1	
123(2)		VXA2672	RELEASE LEVER (1) UNIT	1	
124(2)		VMB1557	RELEASE SPRING	1	
125(2)		VML1860	RELEASE LEVER	1	
127(2)		VXP1031	TAKE UP REEL GEAR UNIT	1	
128(2)		VXP0981	SUPPLY REEL GEAR UNIT	1	
129(2)		VML1858	RETURN LEVER (R)	1	
130(2)		VML1857	RETURN LEVER (L)	1	
131(2)		VMD0913	STOPPER BASE	1	
132(2)		VDV0169	TIMING BELT	1	
133(2)		VXP1113	ROTOR UNIT	1	
135(2)		VEK4097	STATOR UNIT	1	<!>
136(2)		VMA6847	SUB PLATE	1	
137(2)		VXP1050	CENTRE PULLEY UNIT	1	
138(2)		VDG0564	LOADING GEAR (T)	1	
139(2)		VMB1555	LOADING SPRING (T)	1	
140(2)		VXL1489	LOADING ARM (T)(1) UNIT	1	
141(2)		VXA3515	SECTOR GEAR UNIT	1	
142(2)		VDG0516	LOADING CAM GEAR	1	
143(2)		VDG0419	LOADING GEAR (S)	1	
144(2)		VML2266	PLAY CONTROL ARM	1	
145(2)		VXL1487	LOADING ARM (S)(1) UNIT	1	
146(2)		VDG0546	INTERMEDIATE GEAR	1	
147(2)		VXL1861	PLAY ARM UNIT	1	
148(2)		VBK0048	FG HEAD	1	
149(2)		VMB1746	LOADING SPRING(S)	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
151(2)		VXP1029	REVIEW CLUTCH UNIT	1	
152(2)		VXP1030	TENSION RELEASE CLUTCH UNIT	1	
153(2)		VXL1851	REVIEW ARM UNIT	1	
154(2)		VML2197	TENSION RELEASE LEVER	1	
155(2)		VMX1536	CUT WASHER	1	
156(2)		VML2233	SUB CAM FOLLOWER	1	
157(2)		VMX1495	RUBBER STOPPER	1	
158(2)		VDG0517	SUB LEVER CAM	1	
159(2)		VDV0199	REVIEW CLUTCH TIMING BELT	1	
160(2)		VML2200	REVIEW CONTROL LEVER	1	
161(2)		VHD0431	STATOR SPACER SCREW	1	
162(2)		VHN0102	STATOR NUT	1	
201(3)		VMA7223	TOP PLATE	1	
202(3)		VXA3840	CASSETTE HOLDER UNIT	1	
216(3)		VXA4467	SIDE PLATE (L) UNIT	1	
217(3)		VMD1787	SIDE PLATE (L)	1	
218(3)		VML1880	OPENER LEVER	1	
219(3)		VXA4076	SIDE PLATE (R) UNIT	1	
221(3)		VXA4642	SLIDE SW UNIT	1	
229(3)		VXP0987	MAIN SHAFT UNIT	1	
230(3)		VMB1836	SUB WIPER SPRING (L)	1	
231(3)		VML1878	SUB WIPER ARM (L)	1	
232(3)		VML1879	SUB WIPER ARM (R)	1	
233(3)		VMB1837	SUB WIPER SPRING (R)	1	
234(3)		VMA6900	CASSETTE GUIDE	1	
235(3)		VKF1212	BLINDER PANEL	1	
236(3)		VMB1258	BLINDER SPRING	1	
240(3)		VMA7224	CASSETTE HOLDER ANGLE	1	
300(4)		VYP3112	FRONT PANEL (1) UNIT	1	
301(4)		VYP3021	TOP PANEL UNIT	1	
302(4)		VKU0323	BOTTOM PLATE	1	
303(4)		VHD0165	TOP PANEL SCREW	4	
304(4)		VHD0059	BOTTOM PLATE SCREW	9	
306(4)		VGQ1421	SOCKET CAP	1	
307(4)		VYC0364	SIDE PANEL (L) UNIT	1	
308(4)		VYC0365	SIDE PANEL (R) UNIT	1	
309(4)		VHD0492	SIDE PANEL SCREW	4	
310(4)		VXU0942	JOG KNOB UNIT	1	
311(4)		VGU4826	SHUTTLE KNOB	1	
312(4)		VGU4497	DOOR OPEN BUTTON	1	
313(4)		VGU4498	DOOR LOCK LEVER	1	
314(4)		VGU4829	LOCK LEVER HOLDER	1	
315(4)		VMB1963	LOCK LEVER SPRING	1	
316(4)		VES0684	KEY BOARD PANEL UNIT	1	
317(4)		VYC0541	DOOR ALUMINUM UNIT	1	
318(4)		VGP2211	DOOR SUB PANEL	1	
319(4)		VGL0379	PANEL LIGHT	1	
320(4)		VYP2834	DOOR PANEL UNIT	1	
321(4)		VXU0936	DOOR GEAR UNIT	1	
322(4)		VMG0657	CUSHION RUBBER	2	
323(4)		VKF1295	DOOR SUPPORT PANEL	1	
324(4)		VMP2314	DOOR PANEL ANGLE	1	
325(4)		VMC0522	PANEL EARTH SPRING	1	
326(4)		VMP2334	TOP HOLDER ANGLE (FRONT-R)	1	
327(4)		VMP2335	TOP HOLDER ANGLE (REAR-R)	1	
328(4)		VMP2336	TOP HOLDER ANGLE (REAR-L)	1	
329(4)		VMP2511	TOP HOLDER ANGLE (FRONT-L)	1	
330(4)		VYF1430	SUPPORT PANEL UNIT	1	
331(4)		VXB0009	DAMPER SPRING UNIT	1	
332(4)		VYQ0334	LEG (R) UNIT	2	
333(4)		VYQ0333	LEG (F) UNIT	2	
334(4)		VKA0084	LEG RUBBER	2	
335(4)		VJF0102	WIRE CLIP	1	
336(4)		VJF0022	WIRE SADDLE	1	
337(4)		VKC0354	MAIN HINGE CLIP	2	
338(4)		VJF0792	C.B.A. SUPPORTER	2	
339(4)		VHD0418	MAIN SCREW	1	
340(4)		VHD0168	CHASSIS MOUNT SCREW	1	
341(4)		VSC2623	HEAT SINK (O)	1	
342(4)		VKF1150	HEAT SINK COVER	1	
343(4)		VJF0425	CLAMPER	1	
344(4)		VXA3838	POWER SHIELD PLATE (MAIN)	1	
			UNIT		

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
345(4)		VSC2621	POWER SHIELD PLATE (TOP)	1	
346(4)		VSC2622	POWER SHIELD PLATE (BOTTOM)	1	
347(4)		VMP2337	INLET ANGLE	1	
348(4)		VSC2960	HEAT SINK (P)	1	
349(4)		VGH1809	POWER NAME PLATE	1	
350(4)		VGQ1615	IC HOLDER	1	
351(4)		VMZ1455	INSULATION SHEET	1	<!>
352(4)		VMC0357	Tr. HOLDER SPRING	1	
353(4)		VMZ1454	BARRIER (A)	1	<!>
354(4)		VMZ1465	BARRIER (B)	1	<!>
356(4)		VJH0559	RF & ANT. BORD	1	
358(4)		VMZ1317	POWER BARRIER	1	
400(5)		VQT4650	OPERATING INSTRUCTIONS	1	<!>
			(FRENCH)		
400(5)		VQT4652	OPERATING INSTRUCTIONS	1	<!>
			(ENGLISH/GERMAN)		
401(5)		VQC1864	PROGRAMME SHEET	1	
402(5)		VJA0376	DIN RF CABLE	1	
403(5)		VEQ1069	REMOTE CONTROLLER UNIT	1	
404(5)		VJA0231	AUDIO CABLE	2	
405(5)		VJA0664	AC CORD	1	<!>
406(5)		VEQ1329	DIGITAL SCANNER UNIT	1	
407(5)		VJA0658	S-VIDEO 4P CABLE	1	
408(5)		VPK1364	ACCESSORIES PACKING	1	
409(5)		VPN2682	CUSHION (R)	1	
410(5)		VPN2683	CUSHION (L)	1	
411(5)		VPG6433	PACKING	1	
412(5)		VJA0254	RF ADAPTOR (ANT SIDE)	1	
413(5)		VJA0255	RF ADAPTOR (TV SIDE)	1	
414(5)		VKF1062	BATTERY COVER	1	
450(6)		VYK2873	TOP COVER UNIT	1	
451(6)		VKM1882	BOTTOM COVER	1	
452(6)		VKF1416	BATTERY COVER	1	
453(6)		VKW0878	IR WINDOW	1	
454(6)		VSP0485	RUBBER CONTACT	1	
455(6)		VGU4813	JOG KNOB	1	
456(6)		VMC0465	JOG SPRING	1	
457(6)		VGU4814	SHUTTLE KNOB	1	
458(6)		VJR0498	ELECTRODE (A)	1	
459(6)		VJR0509	ELECTRODE (B)	1	
			SERVICING FIXTURES & TOOLS		
		VFJ8125H3F	VHS ALIGNMENT TAPE(PAL)	1	
		VFK0335	RETAINING RING REMOVER	1	
			(3mm/4mm)		
		VFK0387	TENSION POST ADJUSTMENT	1	
			PLATE		
		VFK0191	POST ADJUSTMENT PLATE	1	
		VFK0190	REEL TABLE HEIGHIT GAUGE	1	
		VFK0328	H-POSITION ADJUSTMENT	1	
			SCREWDRIVER		
		VFK0329	POST ADJUSTMENT SCREWDRIVER	1	
		VFK62	FAN TYPE TENSION GAUGE	1	
		VFK0326	HEX WRENCH SET	1	
		VFK0132	BACK TENSION METER	1	
		VFK0343	CHECK LIGHT	1	
		VFK0344	HEIGHIT ADJUSTMENT FIXTURE	1	
		VFK27	HEAD CLEANING STICK	1	
		MOR265	MORLYTONE GREASE	1	
		VFK0341	UPPER CYLINDER REMOVER	1	
		VFK0582	8 PIN EXTENSION CABLE	1	
		VFK0583	9 PIN EXTENSION CABLE	1	
		VFK0584	11 PIN EXTENSION CABLE	1	
		VFK0585	12 PIN EXTENSION CABLE	1	
		VFK0586	15 PIN EXTENSION CABLE	1	

4-3. ELECTRICAL REPLACEMENT PARTS LIST

Note:1.* Be sure to make your orders of replacement parts according to this list.
2.IMPORTANT SAFETY NOTICE
Components identified with the mark <!> have the special characteristics for safety. When replacing any of these components,use only the same type.
3.Unless otherwise specified,
All resistors are in OHMS ,K=1,000 OHMS. All capacitors are in MICRO-FARADS(uf),P=uuF.
4.The P.C.Board units marked width'█'show below the main assembled parts.
5.Printed circuit board assembly with mark(NLA) is no longer available after discontinuation of the product.

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
		VEP03633J	MAIN C.B.A.	1	(NLA)
					INCLUDING THE SERVO
					PACK C.B.A.
					(VEP02341A),
					LUMINANCE &
					CHROMINANCE PACK
					C.B.A.(VEP03634D),
					HQ PACK C.B.A.
					(VEP03635C),
					INPUT/OUTPUT PACK
					C.B.A.(VEP03642A),
					TV DEMODULATOR PACK
					C.B.A.(VJEP07693A),
					SIF PACK C.B.A.
					(VEP07698A),
					Hi-Fi AUDIO PACK
					C.B.A.(VEP04242K),
					AUDIO EQULIZER PACK
					C.B.A.(VEP00P10A).
		VEP02341A	SERVO PACK C.B.A.	1	(NLA)
					INCLUDED IN MAIN
					C.B.A.(VEP03633J).
		VEP03634D	LUMINANCE & CHROMINANCE	1	(NLA)
			PACK C.B.A.		INCLUDED IN MAIN
					C.B.A.(VEP03633J),
					INCLUDING THE DDR
					SECAM PACK C.B.A.
					(VEP03673B).
		VEP03673B	DDR SECAM PACK C.B.A.	1	(NLA)
					INCLUDED IN LUMINANCE
					S CHROMINANCE PACK
					C.B.A.(VEP03634D).
		VEP03635C	HQ PACK C.B.A.	1	(NLA)
					INCLUDED IN MAIN
					C.B.A.(VEP03633J).
		VEP03642A	INPUT/OUTPUT PACK C.B.A.	1	(NLA)
					INCLUDED IN MAIN
					C.B.A.(VEP03633J).
		VEP07693A	TV DEMODULATOR PACK C.B.A.	1	(NLA)
					INCLUDED IN MAIN
					C.B.A.(VEP03633J).
		VEP07698A	SIF PACK C.B.A.	1	(NLA)
					INCLUDED IN MAIN
					C.B.A.(VEP03633J).
		VEP04242K	Hi-Fi AUDIO PACK C.B.A.	1	(NLA)
					INCLUDED IN MAIN
					C.B.A.(VEP03633J).
		VEP00P10A	AUDIO EQULIZER PACK C.B.A.	1	(NLA)
					INCLUDED IN MAIN
					C.B.A.(VEP03633J).
		VEP03639D	LUMINANCE & CHROMINANCE	1	(NLA)
			SEPARATION C.B.A.		INCLUDING THE CCD
					PACK C.B.A.
					(VEP03691A).
		VEP03691A	CCD PACK C.B.A.	1	(NLA)
					INCLUDED IN
					LUMINANCE &
					CHROMINANCE
					SEPARATION C.B.A.
					(VEP03639D).
		VEP03677A	SUB LUMINANCE & CHROMINANCE	1	(NLA)
			PACK C.B.A.		INCLUDING THE 1H
					DELAY CCD PACK
					C.B.A.(VEP03680A).
		VEP03680A	1H DELAY CCD PACK C.B.A.	1	(NLA)
					INCLUDED IN SUB
					LUMINANCE &
					CHROMINANCE PACK
					C.B.A.(VEP03677A).
		VEP03743A	PAL/SECAM TRANSCODER C.B.A.	1	(NLA)<!>
		VEP03744A	SECAM CHROMINANCE C.B.A.	1	(NLA)
		VEP05149A	HEAD AMP C.B.A.	1	(NLA)
		VEP06595A	VR C.B.A.	1	(NLA)
					INCLUDING THE HEAD
					PHONE & MIC JACK
					C.B.A.(VEP00M29A).
		VEP00M29A	HEAD PHONE & MIC JACK	1	(NLA)
			C.B.A.		INCLUDED IN VR
					C.B.A.(VEP06595A).
		VEP07530H	TIMER C.B.A.	1	(NLA)
		VEP06597A	JOG SHUTTLE C.B.A.	1	(NLA)
		VEP01381H	POWER C.B.A.	1	(NLA)<!>
		VEP01397A	AUDIO POWER C.B.A.	1	(NLA)<!>
		VEP00P38B	S-VHS TERMINAL C.B.A.	1	(NLA)
		VEP00P23B	CYLINDER DRIVE C.B.A.	1	(NLA)
		VEP00K88C	FE HEAD AMP C.B.A.	1	(NLA)
		VEP00M86A	FG AMP C.B.A.	1	(NLA)
		VXA3825	MECHANISM CONNECTION C.B.A.	1	(NLA)
		VEK3578	PHOTO Tr. (S) C.B.A.	1	(NLA)
		-------	PHOTO Tr. (T) C.B.A.	1	(NLA)
		VEP66107A	REMOTE CONTROLLER(A) C.B.A.	1	(NLA)
		VEP66082A	REMOTE CONTROLLER(B) C.B.A.	1	(NLA)
		ENC17960	RF CONVERTER	1	(NLA)<!>

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
		ENV59846H3R	TUNER	1	(NLA)<!>
F1101,02		XBA2C16TB0	FUSE	2	(NLA)<!>
	■	VEP03633J	MAIN C.B.A.		(NLA)
			CONNECTORS		
BP1003		VJP1253	CONNECTOR (MALE)	1	
BP1004		VJF0094	CONNECTOR	1	
BP2003		VJP1254	CONNECTOR (MALE)	1	
BP3007		VJP1257	CONNECTOR (MALE)	1	
BP3008		VJP1259	CONNECTOR (MALE)	1	
			CAPACITORS		
C301		ECEA1CK220	E.CAPACITOR 16V 22U	1	
C302-04		ECEA1CK100	E.CAPACITOR 16V 10U	3	
C305		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C306		ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C307		ECEA0JU331	E.CAPACITOR 6.3V 330U	1	
C308		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C309		ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
C311		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C312		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C313		ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
C316		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C317		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C318		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C320		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C322		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C323		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C324		ECEA1HKN2R2	E.CAPACITOR 50V 2.2U	1	
C325		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	1	
C326		ECEA0JK220	E.CAPACITOR 6.3V 22U	1	
C329		ECEA0JK220	E.CAPACITOR 6.3V 22U	1	
C330		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C331		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C332		ECEA0JK220	E.CAPACITOR 6.3V 22U	1	
C333		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C334		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C335		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
C336		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C337		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C338,39		ECEA0JK220	E.CAPACITOR 6.3V 22U	2	
C341		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C342		ECUM1H473ZFN	C.CAPACITOR CH 50V 0.047U	1	
C344		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C345		ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C346		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C348		ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
C349		ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
C701		ECEA1CK220	E.CAPACITOR 16V 22U	1	
C702		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C703		ECEA1HKR33	E.CAPACITOR 50V 0.33U	1	
C705		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C706		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C707		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C708,09		ECEA1CK220	E.CAPACITOR 16V 22U	2	
C711,12		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C714		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C716-18		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C719		ECEA1HK3R3	E.CAPACITOR 50V 3.3U	1	
C721		ECEA1HKN2R2	E.CAPACITOR 50V 2.2U	1	
C722		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C723		ECUM1H120JCN	C.CAPACITOR CH 50V 12P	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C724		ECQB1H153J	P.CAPACITOR 50V 0.015U	1	
C726		ECEA1HKN0R1	E.CAPACITOR 50V 0.1U	1	
C727		ECEA1HK0R1	E.CAPACITOR 50V 0.1U	1	
C728		ECEA1HK3R3	E.CAPACITOR 50V 3.3U	1	
C729		ECEA1HKR33	E.CAPACITOR 50V 0.33U	1	
C730		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C731,32		ECEA1CK470	E.CAPACITOR 16V 47U	2	
C733-36		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	4	
C740		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C741		ECRHA010A41	CAPACITOR	1	
C742		ECUM1H030CCN	C.CAPACITOR CH 50V 3P	1	
C743		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C744		ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C745		ECUM1H040CCN	C.CAPACITOR CH 50V 4P	1	
C746		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C747		ECUM1H120JCN	C.CAPACITOR CH 50V 12P	1	
C748		ECUM1H820JPN	C.CAPACITOR CH 50V 82P	1	
C749		ECRHA010A41	CAPACITOR	1	
C750		ECUM1H220JPN	C.CAPACITOR CH 50V 22P	1	
C751		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C752		ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C753		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C755		ECUM1H150JPN	C.CAPACITOR CH 50V 15P	1	
C756		ECRHA010A41	CAPACITOR	1	
C757		ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C758		ECUM1H102ZFN	C.CAPACITOR CH 50V 1000P	1	
C759		ECUM1H390JPN	C.CAPACITOR CH 50V 39P	1	
C760		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C762		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C763		ECQB1H103JH	P.CAPACITOR 50V 0.01U	1	
C764		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C765		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C766		ECQV1H823JZ	P.CAPACITOR 50V 0.082U	1	
C770		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C771		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C772		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C774		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C776		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C781		ECUM1H390JCN	C.CAPACITOR CH 50V 39P	1	
C782		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C783		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C784		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C786-88		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C789		ECUM1H152JBN	C.CAPACITOR CH 50V 1500P	1	
C790		ECEA1HKNR22	E.CAPACITOR 50V 0.22U	1	
C791		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C792		ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C793		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C794		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C795		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C796-98		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C799		ECEA1CK220	E.CAPACITOR 16V 22U	1	
C801		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C802		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C803,04		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C805		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C806		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C807		ECEA0JK221	E.CAPACITOR 6.3V 220U	1	
C808		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C810		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C811		ECQV1H823JZ	P.CAPACITOR 50V 0.082U	1	
C812		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	1	
C813		ECEA1HFS4R7	E.CAPACITOR 50V 4.7U	1	
C814		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C815		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C816		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
C817		ECQV1H224JZ	P.CAPACITOR 50V 0.22U	1	
C819		ECEA0JK221	E.CAPACITOR 6.3V 220U	1	
C821		ECEA1HK3R3	E.CAPACITOR 50V 3.3U	1	
C823		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C824		ECUM1H681KBN	C.CAPACITOR CH 50V 680P	1	
C825		ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
C826		ECUM1H471KBN	C.CAPACITOR CH 50V 470P	1	
C827		ECEA0JK220	E.CAPACITOR 6.3V 22U	1	
C828		ECQV1H154JZ	P.CAPACITOR 50V 0.15U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C829		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C830-32		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	3	
C833		ECRHA020D41	TRIMMER	1	
C834		ECUM1H060DCN	C.CAPACITOR CH 50V 6P	1	
C835,36		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C852		ECEA1CK330	E.CAPACITOR 16V 33U	1	
C853		ECEA1AFS470	E.CAPACITOR 10V 47U	1	
C854		ECQV1H563JZ	P.CAPACITOR 50V 0.056U	1	
C855		ECEA1CK330	E.CAPACITOR 16V 33U	1	
C856		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C859		ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C1001		ECEA1AK330	E.CAPACITOR 10V 33U	1	
C1002		ECEA0JU471	E.CAPACITOR 6.3V 470U	1	
C1003		EECS5R5V105	TRIMMER	1	
C1004		ECEA1AK330	E.CAPACITOR 10V 33U	1	
C1005		ECEA1CK330	E.CAPACITOR 16V 33U	1	
C1006		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C1007,08		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C1009		ECEA1CK330	E.CAPACITOR 16V 33U	1	
C1011		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C1012		ECEA1HU470	E.CAPACITOR 50V 47U	1	
C1014		ECEA1VFE820	E.CAPACITOR 35V 82U	1	
C2001		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
C2002		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C2003		ECQB1H103JH	P.CAPACITOR 50V 0.01U	1	
C2201		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C2204		ECQV1H683JZ	P.CAPACITOR 50V 0.068U	1	
C2205		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C2206		ECEA0JKS470	E.CAPACITOR 6.3V 47U	1	
C2207		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C2208		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C2209		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2210		ECQB1H332JH	P.CAPACITOR 50V 3300P	1	
C2211		ECQB1H472JH	P.CAPACITOR 50V 4700P	1	
C2212		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C2213		ECEA1CKN4R7	E.CAPACITOR 16V 4.7U	1	
C2214		ECQV1H224JZ	P.CAPACITOR 50V 0.22U	1	
C2215		ECQV1H474JZ	P.CAPACITOR 50V 0.47U	1	
C2216		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C2217		ECEA1CKN4R7	E.CAPACITOR 16V 4.7U	1	
C2218		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C2219		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2220		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C2221		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C2222		ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C2223		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C2224		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C2225		ECUM1H181JCN	C.CAPACITOR CH 50V 180P	1	
C2226		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C2227,28		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C2229		ECEA1AK330	E.CAPACITOR 10V 33U	1	
C2230		ECEA1CU470	E.CAPACITOR 16V 47U	1	
C2231		VCYD1C333MR1	S.CAPACITOR 16V 0.033U	1	
C2232		ECEA1CKS470	E.CAPACITOR 16V 47U	1	
C2233-35		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	3	
C2236		VCYD1C333MR1	S.CAPACITOR 16V 0.033U	1	
C2237-39		ECQB1H333JH	P.CAPACITOR 50V 0.033U	3	
C2240		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C2241		ECQV1H474JZ	P.CAPACITOR 50V 0.47U	1	
C2242		ECQV1H473JZ	P.CAPACITOR 50V 0.047U	1	
C2243		ECEA0JK330	E.CAPACITOR 6.3V 33U	1	
C2244		ECSF1CE105	T.CAPACITOR 16V 1U	1	
C2245		ECEA0JK330	E.CAPACITOR 6.3V 33U	1	
C2246		ECEA1OM47	E.CAPACITOR 10V 47U	1	
C2247		ECEA1HK3R3	E.CAPACITOR 50V 3.3U	1	
C2248,49		ECUM1H472KBN	C.CAPACITOR CH 50V 4700P	2	
C2250		ECQB1H223JH	P.CAPACITOR 50V 0.022U	1	
C2251		ECEA1HK3R3	E.CAPACITOR 50V 3.3U	1	
C2262		VCYD1C333MR1	S.CAPACITOR 16V 0.033U	1	
C2263		ECEA1HK3R3	E.CAPACITOR 50V 3.3U	1	
C2264		ECEA1EU221	E.CAPACITOR 25V 220U	1	
C2265		ECUM1H472KBN	C.CAPACITOR CH 50V 4700P	1	
C2266		ECEA0JKS470	E.CAPACITOR 6.3V 47U	1	
C2267,68		ECUM1H151JCN	C.CAPACITOR CH 50V 150P	2	
C2269		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C2270		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C2271		ECQV1H184JZ	P.CAPACITOR 50V 0.18U	1	
C2272		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C2273		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2274		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C2301		ECQV1H333JZ	P.CAPACITOR 50V 0.033U	1	
C2302		ECEA1CKS220	E.CAPACITOR 16V 22U	1	
C2303		ECUM1H333KBN	C.CAPACITOR CH 50V 0.033U	1	
C2304		ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C2305		ECEA0JKS330	E.CAPACITOR 6.3V 33U	1	
C2306		ECEA0JSN220	E.CAPACITOR 6.3V 22U	1	
C2307		ECUM1H473ZFN	C.CAPACITOR CH 50V 0.047U	1	
C2308		ECEA0JKS470	E.CAPACITOR 6.3V 47U	1	
C2309		ECUM1H471KBN	C.CAPACITOR CH 50V 470P	1	
C2310		ECEA0JKS220	E.CAPACITOR 6.3V 22U	1	
C2311		ECEA1HKS010	E.CAPACITOR 50V 1U	1	
C2312,13		ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	2	
C3001		VCYE1C104MR1	S.CAPACITOR 16V 0.1U	1	
C3002,03		ECEA0JK470	E.CAPACITOR 6.3V 47U	2	
C3004-06		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C3012		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3013		ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C3014		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C3015		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C3016		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C3017		ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
C3033		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C3034		ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C3035		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3036		ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C3038		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C3041,42		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3043		ECUM1H060DCN	C.CAPACITOR CH 50V 6P	1	
C3044		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C3045		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C3046		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C3047		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3048		ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C3050		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3052		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3301		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
C3302		ECEA0JK220	E.CAPACITOR 6.3V 22U	1	
C3303		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C3304		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C3305		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C3306		ECEA0JK220	E.CAPACITOR 6.3V 22U	1	
C3307		ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C3308,09		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3310,11		ECEA1CKS100	E.CAPACITOR 16V 10U	2	
C3312,13		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3314		ECQV1H334JZ	P.CAPACITOR 50V 0.33U	1	
C3315		ECEA1HKS4R7	E.CAPACITOR 50V 4.7U	1	
C3316		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3317		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C3318		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C3319		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3320		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C3321		ECEA1EKS4R7	E.CAPACITOR 25V 4.7U	1	
C3322		ECUM1H473ZFN	C.CAPACITOR CH 50V 0.047U	1	
C3323		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C3324		ECEA0JK220	E.CAPACITOR 6.3V 22U	1	
C3325		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3351-53		ECEA1CK100	E.CAPACITOR 16V 10U	3	
C3354,55		ECUM1H332KBN	C.CAPACITOR CH 50V 3300P	2	
C3901-07		ECEA1AK470	E.CAPACITOR 10V 47U	7	
C3908		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C3909		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3911		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C3912		ECEA0JKN470	E.CAPACITOR 6.3V 47U	1	
C3913		ECEA1AU471	E.CAPACITOR 10V 470U	1	
C3914		ECEA1CU221	E.CAPACITOR 16V 220U	1	
C3915		ECEA0JKN470	E.CAPACITOR 6.3V 47U	1	
C3916		ECEA1AU471	E.CAPACITOR 10V 470U	1	
C3917		ECEA1CU221	E.CAPACITOR 16V 220U	1	
C3918		ECEA1AK470	E.CAPACITOR 10V 47U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C3919		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3951		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3954		VCEA1AAC101	E.CAPACITOR 10V 100U	1	
C3955		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C3965		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4001		ECQB1H103JH	P.CAPACITOR 50V 0.01U	1	
C4002		ECEA16M33	E.CAPACITOR 16V 33U	1	
C4003		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C4004		ECQP1222JZ	P.CAPACITOR 0.0022U	1	
C4005		ECCD2H121J	C.CAPACITOR 500V 120P	1	
C4006		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C4007		ECEA1CK330	E.CAPACITOR 16V 33U	1	
C4008		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C4009		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
C4012		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C4013		ECUM1H681KBN	C.CAPACITOR CH 50V 680P	1	
C4014		ECUM1H122KBN	C.CAPACITOR CH 50V 1200P	1	
C4015		ECEA16M10R	E.CAPACITOR 16V 10U	1	
C4016		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C4017		ECEA10M47	E.CAPACITOR 10V 47U	1	
C4018		ECQB1H822JH	P.CAPACITOR 50V 8200P	1	
C4019		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C4020		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C4021		ECEA1AK101	E.CAPACITOR 10V 100U	1	
C4022		ECUM1H152KBN	C.CAPACITOR CH 50V 1500P	1	
C4023		ECUM1H221JN	C.CAPACITOR CH 50V 220P	1	
C4024,25		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	2	
C4026		VCYE1C104MR1	S.CAPACITOR 16V 0.1U	1	
C4027		ECUM1H102JN	C.CAPACITOR CH 50V 1000P	1	
C4028		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C4101		ECEA1APK101	E.CAPACITOR 10V 100U	1	
C4103		ECEA1HPK010	E.CAPACITOR 50V 1U	1	
C4104		ECEA1APK101	E.CAPACITOR 10V 100U	1	
C4106		ECEA1APK470	E.CAPACITOR 10V 47U	1	
C4107		ECEA1HPK010	E.CAPACITOR 50V 1U	1	
C4108		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C4110,11		ECEA1CK100	E.CAPACITOR 16V 10U	2	
C4112		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C4114,15		ECUM1H473ZFN	C.CAPACITOR CH 50V 0.047U	2	
C4118		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4120		ECQB1H103JH	P.CAPACITOR 50V 0.01U	1	
C4121		ECUM1H223ZFN	C.CAPACITOR CH 50V 0.022U	1	
C4122		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C4123		ECUN1H221KBN	C.CAPACITOR CH 50V 220P	1	
C4124		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C4125		ECQB1H102JH	P.CAPACITOR 50V 1000P	1	
C4126		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C4127-29		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C4130		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4131		ECEA0JK221	E.CAPACITOR 6.3V 220U	1	
C4133		ECKF1H331KB	C.CAPACITOR 50V 330P	1	
C4201		ECQV1H333JZ	P.CAPACITOR 50V 0.033U	1	
C4202		ECQV1H563JZ	P.CAPACITOR 50V 0.056U	1	
C4203		ECQB1H682JH	P.CAPACITOR 50V 6800P	1	
C4204		ECQB1H103JZ	P.CAPACITOR 50V 0.01U	1	
C4205		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C4501		VCEA1VAG4R7	E.CAPACITOR 35V 4.7U	1	
C4502		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C4503		ECQB1H102JA	P.CAPACITOR 50V 1000P	1	
C4504		ECHR1H223JZ	C.CAPACITOR 50V 0.022U	1	
C4505		ECQB1H682JA	P.CAPACITOR 50V 6800P	1	
C4506		VCEA1EAE100	E.CAPACITOR 25V 10U	1	
C4507		ECHR1H223JZ	C.CAPACITOR 50V 0.022U	1	
C4508		VCEA1EAE4R7	E.CAPACITOR 25V 4.7U	1	
C4509		VCEA1CAH470	E.CAPACITOR 16V 47U	1	
C4510		ECHR1H103JZ	C.CAPACITOR 50V 0.01U	1	
C4511		ECQB1H332JA	P.CAPACITOR 50V 3300P	1	
C4512		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C4513,14		ECUM1H102JN	C.CAPACITOR CH 50V 1000P	2	
C4515		VCEA1EAG3R3	E.CAPACITOR 25V 3.3U	1	
C4516		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C4517		ECEA1APZ101	E.CAPACITOR 10V 100U	1	
C4518,19		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C4520		VCEA1EAE100	E.CAPACITOR 25V 10U	1	
C4522		VCEA1HAE3R3	E.CAPACITOR 50V 3.3U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C4525		ECEA1CPZ220	E.CAPACITOR 16V 22U	1	
C4526		VCEA1CAH101	E.CAPACITOR 16V 100U	1	
C4527		VCEA1AAE101	E.CAPACITOR 10V 100U	1	
C4528		ECEA1HK0R1	E.CAPACITOR 50V 0.1U	1	
C4529		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C4530		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C4531		ECEA1EK3R3	E.CAPACITOR 25V 3.3U	1	
C4532		VCEA1CAE471	E.CAPACITOR 16V 470U	1	
C4534		VCEA1AAE101	E.CAPACITOR 10V 100U	1	
C4535		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C4536		ECQB1H223JH	P.CAPACITOR 50V 0.022U	1	
C4537		ECUM1H331JCN	C.CAPACITOR CH 50V 330P	1	
C4538		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C4539		ECQB1H223JZ	P.CAPACITOR 50V 0.022U	1	
C4540-42		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C4543		ECUM1H122JN	C.CAPACITOR CH 50V 1200P	1	
C4551		VCEA1EAG4R7	E.CAPACITOR 25V 4.7U	1	
C4552		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C4553		ECQB1H102JA	P.CAPACITOR 50V 1000P	1	
C4554		ECHR1H223JZ	C.CAPACITOR 50V 0.022U	1	
C4555		ECQB1H682JA	P.CAPACITOR 50V 6800P	1	
C4556		VCEA1EAE100	E.CAPACITOR 25V 10U	1	
C4557		ECHR1H223JZ	C.CAPACITOR 50V 0.022U	1	
C4558		VCEA1EAE4R7	E.CAPACITOR 25V 4.7U	1	
C4559		VCEA1CAH470	E.CAPACITOR 16V 47U	1	
C4560		ECHR1H103JZ	C.CAPACITOR 50V 0.01U	1	
C4561		ECQB1H332JA	P.CAPACITOR 50V 3300P	1	
C4562		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C4563,64		ECUM1H102JN	C.CAPACITOR CH 50V 1000P	2	
C4565		VCEA1EAG3R3	E.CAPACITOR 25V 3.3U	1	
C4566		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C4567		ECEA1APZ101	E.CAPACITOR 10V 100U	1	
C4568,69		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C4570		VCEA1EAE100	E.CAPACITOR 25V 10U	1	
C4572		VCEA1HAE3R3	E.CAPACITOR 50V 3.3U	1	
C4574,75		ECEA1HK010	E.CAPACITOR 50V 1U	2	
C4593		ECUM1H122JN	C.CAPACITOR CH 50V 1200P	1	
C4901,02		VCEA1AAC101	E.CAPACITOR 10V 100U	2	
C4903-08		ECEA1CK100	E.CAPACITOR 16V 10U	6	
C4909		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C4910-15		ECEA1CK100	E.CAPACITOR 16V 10U	6	
C4916,17		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	2	
C4918		ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C4919		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	1	
C4920		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C4921		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4922,23		ECEA1CKN100	E.CAPACITOR 16V 10U	2	
C4924		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C4926,27		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C4928		VCEA1HAC3R3	E.CAPACITOR 50V 3.3U	1	
C5001		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C5002		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C5003		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C5004		ECEA1EK3R3	E.CAPACITOR 25V 3.3U	1	
C5005		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C5006		ECUM1H181JCN	C.CAPACITOR CH 50V 180P	1	
C5007		ECUM1H391JN	C.CAPACITOR CH 50V 390P	1	
C5008		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C5009		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C5010		ECUM1H181JCN	C.CAPACITOR CH 50V 180P	1	
C5011		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C5012		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C5013		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C5014		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C5015,16		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C5017		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C5018-20		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C5021		ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
C5022		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C5023,24		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	2	
C5025		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C5026		ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C5027,28		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C5030		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C5031		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C5032		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C5033		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C5034		ECUM1H471KBN	C.CAPACITOR CH 50V 470P	1	
C5035		ECUM1H181JCN	C.CAPACITOR CH 50V 180P	1	
C5036		ECUM1H271KBN	C.CAPACITOR CH 50V 270P	1	
C5037		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C5038		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C5039		ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C5040		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C5041		ECUM1H080DCN	C.CAPACITOR CH 50V 80P	1	
C5042		ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
C6001		ECEA0JK330	E.CAPACITOR 6.3V 33U	1	
C6002		VCYE1C104MR1	S.CAPACITOR 16V 0.1U	1	
C6003		ECEA0JK330	E.CAPACITOR 6.3V 33U	1	
C6004		ECQV1H224JZ	P.CAPACITOR 50V 0.22U	1	
C6005		ECUM1H151KBN	C.CAPACITOR CH 50V 150P	1	
C6006		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C6007		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6008		ECQB1H223JH	P.CAPACITOR 50V 0.022U	1	
C6010,11		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	2	
C6012		ECEA1AK330	E.CAPACITOR 10V 33U	1	
C6013,14		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C6015		ECUM1H102ZFN	C.CAPACITOR CH 50V 1000P	1	
C6016		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6017		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C6018,19		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C6020-23		ECUM1H271KBN	C.CAPACITOR CH 50V 270P	4	
C6024-28		ECUN1H221KBN	C.CAPACITOR CH 50V 220P	5	
C6029		ECEA0JU331	E.CAPACITOR 6.3V 330U	1	
C6030		ECEA1CU222	E.CAPACITOR 16V 2200U	1	
C6033		ECEA1CK330	E.CAPACITOR 16V 33U	1	
C6034		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C6037,38		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	2	
C6039		ECEA0JK220	E.CAPACITOR 6.3V 22U	1	
C6041		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C6042		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C6043		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C6044		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C6045		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6046		ECQV1H334JZ	P.CAPACITOR 50V 0.33U	1	
C6047		ECEA0JK220	E.CAPACITOR 6.3V 22U	1	
C7321		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C7322		ECUM1H331JCN	C.CAPACITOR CH 50V 330P	1	
C7325		ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C7326		ECUM1H121JPN	C.CAPACITOR CH 50V 120P	1	
C7327,28		ECQB1H103JH	P.CAPACITOR 50V 0.01U	2	
C7329		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C7330		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C7331		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7336		ECUM1H560JPN	C.CAPACITOR CH 50V 56P	1	
C7337		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C7338		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	1	
C7339		ECQB1H103JH	P.CAPACITOR 50V 0.01U	1	
C7340		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C7356		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C7380		ECEA1HKN2R2	E.CAPACITOR 50V 2.2U	1	
C7381		ECEA1CK330	E.CAPACITOR 16V 33U	1	
C7661		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C7662		ECQV1H683JZ	P.CAPACITOR 50V 0.068U	1	
C7663		ECQV1H823JZ	P.CAPACITOR 50V 0.082U	1	
C7664		ECQB1H273JH	P.CAPACITOR 50V 0.027U	1	
C7665,66		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7667		ECEA1HKA100	E.CAPACITOR 50V 10U	1	
C7670,71		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7673		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7675		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C7676,77		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7678		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7680		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	1	
C7901		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7902		ECUM1C124KBM	C.CAPACITOR CH 16V 0.12U	1	
C7907		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C8301,02		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C8303		ECUM1H471KBN	C.CAPACITOR CH 50V 470P	1	
C8304,05		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C8306		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C8307,08		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C8309		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C8310		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C8311		ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C8312		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C8313		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C8314		ECUM1H471KBN	C.CAPACITOR CH 50V 470P	1	
C8315		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
			DIODES		
D701		MA856	DIODE	1	
D703-05		MA856	DIODE	3	
D707,08		MA856	DIODE	2	
D710		MA3056M	DIODE	1	
D711		MA3100L	DIODE	1	
D771		MA151WK	DIODE	1	
D772		MA29W-AB	DIODE	1	
D773		MA151K	DIODE	1	
D780		1SS254	DIODE	1	
D781		MA151WK	DIODE	1	
D782		MA151K	DIODE	1	
D801		MA151K	DIODE	1	
D802		MA151WA	DIODE	1	
D803		MA151K	DIODE	1	
D804		MA165	DIODE	1	
D1001		AK04	DIODE	1	
D1003,04		MA723VT	DIODE	2	(VT)
D1010,11		MA165VT	DIODE	2	
D1012		MA204WK	DIODE	1	
D1014		MA204WK	DIODE	1	
D1015		MA165VT	DIODE	1	
D1016		MA4091	DIODE	1	
D2201-04		MA165VT	DIODE	4	
D2205		MA4056M	DIODE	1	
D2212		MA165VT	DIODE	1	
D2216,17		MA165VT	DIODE	2	
D2301-04		MA165VT	DIODE	4	
D2306,07		MA165VT	DIODE	2	
D3001-03		MA165VT	DIODE	3	
D3004		MA723VT	DIODE	1	(VT)
D3006		MA165VT	DIODE	1	
D3301		MA151K	DIODE	1	
D3302		MA3091M	DIODE	1	
D3306		MA151K	DIODE	1	
D3901		MA165VT	DIODE	1	
D3902		MA4068M	DIODE	1	
D4003		MA165VT	DIODE	1	
D4101		MA165VT	DIODE	1	
D4104		MA165VT	DIODE	1	
D4108		MA4047-M	DIODE	1	
D4202		MA165VT	DIODE	1	
D4501		MA151WK	DIODE	1	
D5001		MA151K	DIODE	1	
D6001		MA165VT	DIODE	1	
D6003,04		MA165VT	DIODE	2	
D6005		11ES1	DIODE	1	
D6007-16		MA165VT	DIODE	10	
D6017		MA4091M	DIODE	1	
D6019-22		MA165VT	DIODE	4	
D6025		AK04	DIODE	1	
D6026		MA165VT	DIODE	1	
D6027		MA4075M	DIODE	1	
D6029		MA204WK	DIODE	1	
D6032		MA165VT	DIODE	1	
D6033		MA723VT	DIODE	1	(VT)
D6035-38		MA206		4	
D7308		MA4091M	DIODE	1	(M,L)
D7309		MA29T-A	DIODE	1	
D7311		MA151K	DIODE	1	
D7380-83		MA151K	DIODE	4	
D7901-03		MA151K	DIODE	3	
D8301		MA151K	DIODE	1	
D8303		MA151WK	DIODE	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
			DELAY LINES		
DL801		VLD0147	DELAY LINE	1	
DL8301		VLD0089	DELAY LINE	1	
			FILTERS		
FL301		ELB4L121	FILTER	1	
FL302		VLF0499	FILTER	1	
FL303		VLF0639	FILTER	1	
FL304		ELB4M022	FILTER	1	
FL801		VLF0299	FILTER	1	
FL851		EFCS4R5MS4C	FILTER	1	
FL3301		VLF0413	FILTER	1	
FL3302		ELB4R049	FILTER	1	
FL4501,02		VLF0406	FILTER	2	
FL4503		VLF0697	FILTER	1	
FL5001		ELB5A066	FILTER	1	
FL5002		ELB4K114	FILTER	1	
FL5003		ELB4R031	FILTER	1	
FL5004		ELB4K114	FILTER	1	
			INTEGRATED CIRCUITS		
IC301		VEFH07C	IC	1	
IC302		M52055FP	IC	1	
IC303		VEFH05BT	IC	1	
IC304		NJM2233BMA	IC	1	
IC701		M52040SP	IC	1	
IC703		AN5215	IC	1	
IC801		VCR0284	IC	1	
IC802		NJM2233BMA	IC	1	
IC851		BA7025L	IC	1	
IC2201		AN3726K	IC	1	
IC2202		MN4013BS	IC	1	
IC2203		MN1280R	IC	1	
IC2204		UPD4052BG	IC	1	
IC2205		MN6742VCMK	IC	1	
IC2206		XRA6435S	IC	1	
IC2301		LM358PS	IC	1	
IC2302		MN4066BS	IC	1	
IC2303		UPC393G2	IC	1	
IC3001		M52055FP	IC	1	
IC3301		AN3495K	IC	1	
IC3302		MSM6871RS	IC	1	
IC3307		BA7004	IC	1	
IC3901		M51292FP	IC	1	
IC3902,03		M52055FP	IC	2	
IC3904		BU5747	IC	1	
IC3905		VCR0281	IC	1	
IC4001		XRA7766AS	IC	1	
IC4101		RC4565DD	IC	1	
IC4501		BA7700K1	IC	1	
IC4502		UPC78L05J	IC	1	
IC4901		M51293FP	IC	1	
IC4902		UPC78L06J	IC	1	
IC5001		M52054SP	IC	1	
IC5002		AN6308S	IC	1	
IC6001		MN188166VHS	IC	1	
IC6002		MN1280R	IC	1	
IC6003		MC14011BF	IC	1	
IC6004		LM339N	IC	1	
IC6005		AN6609N	IC	1	
IC6006		LM393PS	IC	1	
IC6007		MC14519BF	IC	1	
IC7302		UPC1167C2	IC	1	
IC7304		MN4011BS	IC	1	
IC7652		AN5043	IC	1	
IC7653		MN4066BS	IC	1	
IC7901		UPD4011BG	IC	1	
			CONNECTORS		
J3951,52		VJS1470	CONNECTOR (FEMALE)	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
KR851		VJR0163	PACK PIN	1	
			COILS		
L302		VLQEL06F101K	COIL 100UH	1	
L303		VLQEL05F680K	COIL 68UH	1	
L304		VLQEL05F560K	COIL 56UH	1	
L305-08		VLQEL05F101K	COIL 100UH	4	
L310		VLQEL05F220K	COIL 22UH	1	
L701		ELESP680KA	COIL 68UH	1	
L702,03		ELESP151KA	COIL 150UH	2	
L704		ELQTR56XB	COIL	1	
L706-08		ELESP151KA	COIL 150UH	3	
L709		ELESP8R2KA	COIL 8.2UH	1	
L710		ELESP2R2KA	COIL 2.2UH	1	
L712		ELESP680KA	COIL 68UH	1	
L713		ELESP151KA	COIL 150UH	1	
L714-16		ELESP680KA	COIL 68UH	3	
L717		ELESP1R0KA	COIL 1UH	1	
L719		ELESP680KA	COIL 68UH	1	
L781		VLQ0213K680	COIL 68UH	1	
L801-03		VLQEL05F101K	COIL 100UH	3	
L805		VLQEL05F101K	COIL 100UH	1	
L806		VLQEL05F150K	COIL 15UH	1	
L809,10		VLQEL05F681K	COIL 680UH	2	
L811		VLQEL05F331K	COIL 330UH	1	
L812		VLQEL05F470K	COIL 47UH	1	
L814		VLQEL05F330J	COIL 33UH	1	
L851		VLQEL05F101K	COIL 100UH	1	
L1010		VLQEL05F102K	COIL 1000UH	1	
L2201-03		VLQEL05F101K	COIL 100UH	3	
L2204		VLQEL05F102K	COIL 1000UH	1	
L3005		VLQEL05F151K	COIL 150UH	1	
L3006		VLQEL05F820K	COIL 82UH	1	
L3007		VLQEL05F101K	COIL 100UH	1	
L3010		VLQEL05F681K	COIL 680UH	1	
L3301-03		VLQEL05F101K	COIL 100UH	3	
L3309		VLQEL05F101K	COIL 100UH	1	
L3312		VLQEL05F101K	COIL 100UH	1	
L3901-04		VLQEL05F101K	COIL 100UH	4	
L4002		VLQEL05F471K	COIL 470UH	1	
L4102		VLQEL05F1R0K	COIL 1UH	1	
L4104		VLQEL05F101K	COIL 100UH	1	
L4105		VLP0085	FILTER	1	
L4201		VLQEL07F153J	COIL 15MH	1	
L4501,02		VLQEL05F101K	COIL 100UH	2	
L5001		VLQEL05F101K	COIL 100UH	1	
L5002		VLQEL05F181K	COIL 180UH	1	
L5003		VLQEL05F270K	COIL 27UH	1	
L5004,05		VLQEL05F5R6K	COIL 5.6UH	2	
L5006		VLQEL05F120K	COIL 12UH	1	
L5007		VLQEL05F101K	COIL 100UH	1	
L5008,09		VLQEL05F100K	COIL 10UH	2	
L5010		VLQEL05F220K	COIL 22UH	1	
L5012,13		VLQEL05F101K	COIL 100UH	2	
L7304		ELESQ100KA	COIL 10UH	1	
L7308		ELESP820KA	COIL 82UH	1	
L8301		VLQEL05F101K	COIL 100UH	1	
L8302,03		VLQEL05F150K	COIL 15UH	2	
L8304		VLQEL05F270K	COIL 27UH	1	
L8305		VLQEL05F151K	COIL 150UH	1	
			CONNECTORS		
P001		VJS1232T	CONNECTOR (FEMALE)	1	
P501		VJS1237T	CONNECTOR (FEMALE)	1	
P551		VJS1236T	CONNECTOR (FEMALE)	1	
P1001		VJP2593	CONNECTOR (MALE)	1	
P1001		VJS2593	CONNECTOR (FEMALE)	1	
P1101		VJS1932T	CONNECTOR (FEMALE)	1	
P1103		VJS1142	CONNECTOR (FEMALE)	1	
P1251		VJS1188	CONNECTOR (FEMALE)	1	
P1253		VJH1230T	CONNECTOR	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
P1301		VJF0171T	CONNECTOR	1	
P1502		VJS1141	CONNECTOR (FEMALE)	1	
P2001		VJP1242T	CONNECTOR (MALE) 2P	1	
P2002		VJF0093	CONNECTOR	1	
P2201		VJP1245T	CONNECTOR (MALE) 5P	1	
P2201		VJS1232T	CONNECTOR (FEMALE)	1	
P2202		VJS3193A018A	CONNECTOR (FEMALE)	1	
P2203		VJP1148	CONNECTOR (MALE)	1	
P2203		VJS1141T	CONNECTOR (FEMALE)	1	
P3001		VJP1237T	CONNECTOR (MALE) 10P	1	
P3001		VJS1237T	CONNECTOR (FEMALE)	1	
P3002		VJP1235T	CONNECTOR (MALE) 8P	1	
P3002		VJS1235T	CONNECTOR (FEMALE)	1	
P3003		VJP1237T	CONNECTOR (MALE) 10P	1	
P3003		VJS1237T	CONNECTOR (FEMALE)	1	
P3005		VJP1262	CONNECTOR (MALE)	1	
P3006		VJP1511T	CONNECTOR (MALE)	1	
P3006		VJS1238T	CONNECTOR (FEMALE)	1	
P3301		VJS3136B008Z	CONNECTOR (FEMALE)	1	
P3302		VJS3136B007Z	CONNECTOR (FEMALE)	1	
P3501		VJS1233	CONNECTOR (FEMALE)	1	
P3502		VJS1235T	CONNECTOR (FEMALE)	1	
P3703		VJS1237T	CONNECTOR (FEMALE)	1	
P4001		VJP1231T	CONNECTOR (MALE) 4P	1	
P4002		VJP1236T	CONNECTOR (MALE) 9P	1	
P4002		VJS1236T	CONNECTOR (FEMALE)	1	
P4003		VJP1236T	CONNECTOR (MALE) 9P	1	
P4004		VJP1229T	CONNECTOR (MALE) 2P	1	
P4004		VJS1229T	CONNECTOR (FEMALE)	1	
P4005		VJP1188	CONNECTOR (MALE)	1	
P4005		VJS1188	CONNECTOR (FEMALE)	1	
P4901		VJP1242T	CONNECTOR (MALE) 2P	1	
P4901		VJS1141	CONNECTOR (FEMALE)	1	
P4902		VJP1248T	CONNECTOR (MALE) 8P	1	
P4902		VJS1235T	CONNECTOR (FEMALE)	1	
P4903		VJP1243T	CONNECTOR (MALE) 3P	1	
P6001		VJS3193A015A	CONNECTOR (FEMALE)	1	
P6002		VJS2571A004	CONNECTOR (FEMALE)	1	
P6003		VJP1932T	CONNECTOR (MALE) 3P	1	
P6504		VJS1229T	CONNECTOR (FEMALE)	1	
P7401		VJS2571A006	CONNECTOR (FEMALE)	1	
P7402		VJS2571A013	CONNECTOR (FEMALE)	1	
P7403		VJS2571A011	CONNECTOR (FEMALE)	1	
P7404		VJS2571A008	CONNECTOR (FEMALE)	1	
P7405		VJS2571A010	CONNECTOR (FEMALE)	1	
P8001		VJS1238R	CONNECTOR (FEMALE)	1	
P8002		VJS1238T	CONNECTOR (FEMALE)	1	
P8004		VJS1235T	CONNECTOR (FEMALE)	1	
P8005		VJS1235R	CONNECTOR (FEMALE)	1	
PK701		VJR0231	PACK PIN	1	
PK702,03		VJR0406	PACK PIN	2	
PK704		VJR0231	PACK PIN	1	
PK2201		VJP1865	CONNECTOR (MALE)	1	
PK2201		VJS1865	CONNECTOR (FEMALE)	1	
PK2202		VJP1865	CONNECTOR (MALE)	1	
PK2202		VJS1865	CONNECTOR (FEMALE)	1	
PK2203		VJP1861	CONNECTOR (MALE)	1	
PK2203		VJS1861	CONNECTOR (FEMALE)	1	
PK2204		VJP1859	CONNECTOR (MALE)	1	
PK2204		VJS1859	CONNECTOR (FEMALE)	1	
PK3011		VJP1862	CONNECTOR (MALE)	1	
PK3011		VJS1862	CONNECTOR (FEMALE)	1	
PK3012		VJP1862	CONNECTOR (MALE)	1	
PK3012		VJS1862	CONNECTOR (FEMALE)	1	
PK3013		VJP1861	CONNECTOR (MALE)	1	
PK3013		VJS1861	CONNECTOR (FEMALE)	1	
PK3021		VJP1858	CONNECTOR (MALE)	1	
PK3021		VJS1858	CONNECTOR (FEMALE)	1	
PK3022		VJP1865	CONNECTOR (MALE)	1	
PK3022		VJS1865	CONNECTOR (FEMALE)	1	
PK4201		VJR0231	PACK PIN	1	
PK4501-03		VJR0290	PACK PIN	3	
PK7301,02		VJR0189	CONNECTOR (MALE)	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
			TRANSISTORS		
Q301		2SD601	TRANSISTOR CHIP	1	
Q302		2SC2295	TRANSISTOR	1	
Q703		2SD601-S	TRANSISTOR	1	(S,T)
Q704		2SC3311-S	TRANSISTOR	1	
Q705		2SD1992	TRANSISTOR	1	
Q712		2SD1994	TRANSISTOR	1	
Q713		2SD1328	TRANSISTOR CHIP	1	
Q750		2SD601-S	TRANSISTOR CHIP	1	(S,T)
Q771		2SD601-S	TRANSISTOR CHIP	1	(S,T)
Q772		2SD601-S	TRANSISTOR	1	(S,T)
Q790		2SD1328	TRANSISTOR CHIP	1	
Q801		2SB709	TRANSISTOR CHIP	1	
Q804		2SD601	TRANSISTOR CHIP	1	
Q1001		2SC4024LF	TRANSISTOR	1	
Q1002		2SD601	TRANSISTOR CHIP	1	
Q1003		2SD601A	TRANSISTOR	1	
Q1005		2SD1996-S	TRANSISTOR	1	
Q2201		2SD601	TRANSISTOR CHIP	1	
Q2202		2SC2295	TRANSISTOR	1	
Q2203		2SD602	TRANSISTOR CHIP	1	
Q2204-09		2SD601	TRANSISTOR CHIP	6	
Q2301		2SD601	TRANSISTOR CHIP	1	
Q3001		2SD602	TRANSISTOR	1	
Q3002		2SD1306	TRANSISTOR	1	
Q3006,07		2SD601	TRANSISTOR CHIP	2	
Q3008		2SC2295	TRANSISTOR	1	
Q3009		2SB709-S	TRANSISTOR	1	(S)
Q3301-04		2SC2295	TRANSISTOR	4	
Q3310		2SC2295	TRANSISTOR	1	
Q3901		2SB644	TRANSISTOR	1	
Q3902		2SB709	TRANSISTOR CHIP	1	
Q4001		2SD1992A-R	TRANSISTOR	1	(R)
Q4103		2SD1328	TRANSISTOR CHIP	1	
Q4201-05		2SD1306	TRANSISTOR	5	
Q4502,03		2SD1306	TRANSISTOR	2	
Q4504		2SD601	TRANSISTOR CHIP	1	
Q5001		2SC2295	TRANSISTOR	1	
Q5002,03		2SD601	TRANSISTOR CHIP	2	
Q5004,05		2SC2295	TRANSISTOR	2	
Q5006		2SB709	TRANSISTOR CHIP	1	
Q5007-13		2SC2295	TRANSISTOR	7	
Q5014		2SB709	TRANSISTOR CHIP	1	
Q5015		2SC2295	TRANSISTOR	1	
Q5020		2SC2295	TRANSISTOR	1	
Q6001		2SB1320	TRANSISTOR	1	
Q6002		2SB790-R	TRANSISTOR	1	(R,S)
Q6003		2SB709	TRANSISTOR CHIP	1	
Q6004		2SB790-R	TRANSISTOR	1	(R,S)
Q6006		2SD893	TRANSISTOR	1	
Q6007		2SD592	TRANSISTOR	1	
Q6008		2SC3311	TRANSISTOR	1	
Q6011		2SD1856	TRANSISTOR	1	
Q6012		2SD1991	TRANSISTOR	1	
Q6013-15		2SD601	TRANSISTOR CHIP	3	
Q6017		2SD601	TRANSISTOR CHIP	1	
Q7380		MSD601-S	TRANSISTOR	1	
Q8301		2SD601	TRANSISTOR CHIP	1	
Q8302		2SC2295	TRANSISTOR	1	
			COMBINATION PARTS		
QR301-04		UN2213	TRANSISTOR-RESISTOR	4	
QR305		UN2110	TRANSISTOR-RESISTOR	1	
QR310,11		UN2213	TRANSISTOR-RESISTOR	2	
QR701		MRN1404	TRANSISTOR	1	
QR702		MRN1402	TRANSISTOR	1	
QR703,04		MRN1404	TRANSISTOR	2	
QR705		MRN1402	TRANSISTOR	1	
QR706		MRN1404	TRANSISTOR	1	
QR707		MRN1402	TRANSISTOR	1	
QR713,14		MRN1404	TRANSISTOR	2	
QR801-05		UN2213	TRANSISTOR-RESISTOR	5	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
QR806		UN2113	TRANSISTOR-RESISTOR	1	
QR1001		UN2211	TRANSISTOR-RESISTOR	1	
QR1002		UN2213	TRANSISTOR-RESISTOR	1	
QR2001		UN2211	TRANSISTOR-RESISTOR	1	
QR2201,02		UN2117	TRANSISTOR-RESISTOR	2	
QR2206-09		UN2213	TRANSISTOR-RESISTOR	4	
QR2210		UN2212	TRANSISTOR-RESISTOR	1	
QR2213		UN2112	TRANSISTOR-RESISTOR	1	
QR2214		UN2213	TRANSISTOR-RESISTOR	1	
QR2215		UN2113	TRANSISTOR-RESISTOR	1	
QR2301		UN2213	TRANSISTOR-RESISTOR	1	
QR2302		UN2113	TRANSISTOR-RESISTOR	1	
QR2303-06		UN2213	TRANSISTOR-RESISTOR	4	
QR2307		UN2113	TRANSISTOR-RESISTOR	1	
QR3001,02		UN2213	TRANSISTOR-RESISTOR	2	
QR3003,04		UN2111	TRANSISTOR-RESISTOR	2	
QR3005		UN2213	TRANSISTOR-RESISTOR	1	
QR3006		UN2212	TRANSISTOR-RESISTOR	1	
QR3007		UN2214	TRANSISTOR-RESISTOR	1	
QR3008		UN2111	TRANSISTOR-RESISTOR	1	
QR3009		UN2213	TRANSISTOR-RESISTOR	1	
QR3010		UN2113	TRANSISTOR-RESISTOR	1	
QR3012		DTC363EK	TRANSISTOR-RESISTOR	1	
QR3013		UN211D	TRANSISTOR-RESISTOR	1	
QR3014		UN2211	TRANSISTOR-RESISTOR	1	
QR3016		UN4212	TRANSISTOR-RESISTOR	1	
QR3301-03		UN2213	TRANSISTOR-RESISTOR	3	
QR3901		UN2212	TRANSISTOR-RESISTOR	1	
QR4001		UN2213	TRANSISTOR-RESISTOR	1	
QR4101		UN2213	TRANSISTOR-RESISTOR	1	
QR4102		UN2113	TRANSISTOR-RESISTOR	1	
QR4103,04		UN2112	TRANSISTOR-RESISTOR	2	
QR4105		UN2213	TRANSISTOR-RESISTOR	1	
QR4107		UN6213	TRANSISTOR-RESISTOR	1	
QR4108,09		UN6111	TRANSISTOR-RESISTOR	2	
QR4501,02		UN2213	TRANSISTOR-RESISTOR	2	
QR5001-04		DTC363EK	TRANSISTOR-RESISTOR	4	
QR6002-04		UN2213	TRANSISTOR-RESISTOR	3	
QR6005-09		UN2211	TRANSISTOR-RESISTOR	5	
QR6010		UN2213	TRANSISTOR-RESISTOR	1	
QR6011		UN2211	TRANSISTOR-RESISTOR	1	
QR6013		UN2111	TRANSISTOR-RESISTOR	1	
QR6014		UN2113	TRANSISTOR-RESISTOR	1	
QR6015-17		UN2213	TRANSISTOR-RESISTOR	3	
QR6018		UN2113	TRANSISTOR-RESISTOR	1	
QR6019,20		UN2213	TRANSISTOR-RESISTOR	2	
QR6021		UN2113	TRANSISTOR-RESISTOR	1	
QR6022		UN2111	TRANSISTOR-RESISTOR	1	
QR6024		UN2113	TRANSISTOR-RESISTOR	1	
QR6025		UN2212	TRANSISTOR-RESISTOR	1	
QR6027		UN2213	TRANSISTOR-RESISTOR	1	
QR6028-31		UN2212	TRANSISTOR-RESISTOR	4	
QR7301,02		UN2211	TRANSISTOR-RESISTOR	2	
QR7381-89		MRN1404	TRANSISTOR	9	
QR7901		MRN2404	TRANSISTOR	1	
QR7905		MRN2404	TRANSISTOR	1	
QR7906		MRN1403	TRANSISTOR	1	
QR7907		MRN1404	TRANSISTOR	1	
			RESISTORS		
R302		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R306		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R307		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R308		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R309		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R310		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R312		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R313		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R314		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R315		ERJ6GEYJ391	M.RESISTOR CH 1/10W 390	1	
R316		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R317		ERJ6GEYJ123	M.RESISTOR CH 1/10W 12K	1	
R318,19		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	2	
R320,21		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R322		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R323		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R324		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R325		ERJ6GEYJ911	M.RESISTOR CH 1/10W 910	1	
R326		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R327		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R328		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R330		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R331		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R332		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R337		ERJ6GEYJ391	M.RESISTOR CH 1/10W 390	1	
R338		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R339		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R340		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R341		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R345		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R703,04		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	2	
R706		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R708		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R709		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R710		ERJ6GEYJ684	M.RESISTOR CH 1/10W 680K	1	
R711		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R712		ERJ6GEYK275	M.RESISTOR CH 1/10W	1	
R715		ERJ6GEYJ274	M.RESISTOR CH 1/10W 270K	1	
R716		ERJ6GEYJ334	M.RESISTOR CH 1/10W 330K	1	
R719		ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R723		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R724		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R725		ERJ6GEYJ151	M.RESISTOR CH 1/10W 150	1	
R726		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R727		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R728		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R729		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R730		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R733		ERDS2TJ680	C.RESISTOR 1/4W 68	1	
R737		ERDS2TJ182	C.RESISTOR 1/4W 1.8K	1	
R738		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R739		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R740		ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R742		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R744		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R750		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R751		ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	1	
R756		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R757		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R758		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R760		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R761		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R762		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R763		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R764		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R765		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R766		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R767		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R770		ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R771		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R772		ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	1	
R773		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R774		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R781		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R782		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R784		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R785		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R786		ERJ6GEYJ474	M.RESISTOR CH 1/10W 470K	1	
R788		ERJ6GEYJ474	M.RESISTOR CH 1/10W 470K	1	
R789		ERJ6GEYJ391	M.RESISTOR CH 1/10W 390	1	
R790		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R792		ERJ6GEYJ120	M.RESISTOR CH 1/10W 12	1	
R793		ERJ6GEYJ183	M.RESISTOR CH 1/10W 18K	1	
R794		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R795		ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	1	
R796		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	
R797		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R798		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R799		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R801		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R802		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R803		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R808		ERJ6GEYJ224	M.RESISTOR CH 1/10W 220K	1	
R809,10		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	2	
R811		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R812		ERJ6GEYJ183	M.RESISTOR CH 1/10W 18K	1	
R813		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R814		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R815		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R816		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R817		ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	1	
R818		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R819		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R820		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R821		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R825		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R826		ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R827		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R828		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R851		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R852		ERJ6GEYJ390	M.RESISTOR CH 1/10W 39	1	
R853		ERJ6GEYJ154	M.RESISTOR CH 1/10W 150K	1	
R854		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R855		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R856		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R1002		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R1003		ERJ6GMYJ181	M.RESISTOR CH 1/10W 180	1	
R1004		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R1006		ERJ6GMYG562	M.RESISTOR CH 1/10W 5.6K	1	
R1007		ERJ6GMYG912	M.RESISTOR CH 1/10W 9.1K	1	
R1008		ERDS2TJ391	C.RESISTOR 1/4W 390	1	
R1009		ERJ6GMY0R00	M.RESISTOR CH 1/10W 0	1	
R1010		ERJ6GMYG682	M.RESISTOR CH 1/10W 6.8K	1	
R1011		ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R1012		ERG2ANJ681	M.RESISTOR 2W 680	1	
R1013		ERG2ANJ821	C.RESISTOR 2W 820	1	
R2001		ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R2002		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R2005		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R2006		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R2007		ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R2201		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R2202		ERJ6GMYJ154	M.RESISTOR CH 1/10W 150K	1	
R2203		ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R2204		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2205		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R2206		ERJ6GMYJ123	M.RESISTOR CH 1/10W 12K	1	
R2207		ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R2208		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2209		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R2210		ERJ6GMYJ154	M.RESISTOR CH 1/10W 150K	1	
R2211-13		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	3	
R2214		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R2215,16		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R2217		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2218		ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R2219		ERJ6GMYJ824	M.RESISTOR CH 1/10W 820K	1	
R2220		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2221		ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R2222		ERJ6GMYJ824	M.RESISTOR CH 1/10W 820K	1	
R2223,24		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R2225		ERJ6GMYJ124	M.RESISTOR CH 1/10W 120K	1	
R2226		ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	1	
R2227		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2228		ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R2229-33		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	5	
R2236		ERJ6GMYG362	M.RESISTOR CH 1/10W 3.6K	1	
R2237		ERJ6GMYG821	M.RESISTOR CH 1/10W 820	1	
R2238,39		ERDS2TJ330	C.RESISTOR 1/4W 33	2	
R2240		ERX12SJR47	M.RESISTOR 1/2W 0.47	1	
R2241,42		ERDS2TJ330	C.RESISTOR 1/4W 33	2	
R2243		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2244		ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R2245		ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R2246		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2247		ERJ6GMYG334	M.RESISTOR CH 1/10W 330K	1	
R2248		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R2249		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2250		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2251		ERJ6GMYJ151	M.RESISTOR CH 1/10W 150	1	
R2252		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R2253,54		ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	2	
R2255		ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R2256		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2257		ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R2258		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R2259		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R2260		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2261		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R2266		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2288		ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R2289		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2290		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R2292		ERJ6GMYG392	M.RESISTOR CH 1/10W 3.9K	1	
R2301		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R2302		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R2303		ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R2304		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2305		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2306		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R2307,08		ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	2	
R2309		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2310		ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R2311		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2312		ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R2313		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R2314		ERJ6GMYJ684	M.RESISTOR CH 1/10W 680K	1	
R2315		ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R2316		ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R2317		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R2318		ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R2319		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2320		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2321		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R2322		ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R2323		ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R2324-26		ERJ6GMYG223	M.RESISTOR CH 1/10W 22K	3	
R2327		ERJ6GMYG273	M.RESISTOR CH 1/10W 27K	1	
R2328		ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R2329		ERJ6GMYG823	M.RESISTOR CH 1/10W 82K	1	
R2330,31		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R2332,33		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	2	
R2334		ERJ6GMYJ123	M.RESISTOR CH 1/10W 12K	1	
R2335		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R2336		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R3001		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3002		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3003		ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R3004		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3011		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3012		ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R3013		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3014		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3015		ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R3017		ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R3018-20		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	3	
R3022		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R3023		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3024		ERJ6GMY0R00	M.RESISTOR CH 1/10W 0	1	
R3033,34		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R3038,39		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R3040		ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R3041		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3042		ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R3043		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3044,45		ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	2	
R3046-48		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	3	
R3049		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R3050		ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R3051,52		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R3053		ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R3054,55		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	2	
R3057		ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	1	
R3058		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R3301		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R3302		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3303		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3304		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R3305		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3306		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R3307		ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R3308		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3309		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3310		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3311		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R3312		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R3313		ERJ6GEYJ151	M.RESISTOR CH 1/10W 150	1	
R3314		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3315		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3316		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3317		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3318		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3319		ERJ6GEYJ183	M.RESISTOR CH 1/10W 18K	1	
R3320		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R3321		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R3344		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3345		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R3346,47		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	2	
R3348		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R3349,50		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	2	
R3901,02		ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	2	
R3909		ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	1	
R3916-18		ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	3	
R3919,20		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	2	
R3921		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R3953		ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R3954		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R3955		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R3957		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R3958		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R3968		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R3969		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R3970,71		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	2	
R3972		ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	1	
R3976-79		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	4	
R3980		ERJ6GEYJ390	M.RESISTOR CH 1/10W 39	1	
R4001		ERJ6GMYJ100	M.RESISTOR CH 1/10W 10	1	
R4002		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R4003		ERJ6GMYJ203	M.RESISTOR CH 1/10W 20K	1	
R4004,05		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	2	
R4007		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R4008		ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R4009		ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R4010		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R4012		ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	1	
R4013		ERJ6GMYJ394	M.RESISTOR CH 1/10W 390K	1	
R4014		ERJ6GMYG133	M.RESISTOR CH 1/10W 13K	1	
R4015		ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R4016		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R4017		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R4018		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R4020		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4021		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R4022		ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R4023		ERJ6GMYG473	M.RESISTOR CH 1/10W 47K	1	
R4024,25		ERJ6GMYG104	M.RESISTOR CH 1/10W 100K	2	
R4026		ERJ6GMYJ123	M.RESISTOR CH 1/10W 12K	1	
R4027		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R4030		ERJ6GMYJ512	M.RESISTOR CH 1/10W 5.1K	1	
R4031		ERJ6GMYG103	M.RESISTOR CH 1/10W 10K	1	
R4035		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R4044		ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R4101		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4104		ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R4105,06		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	2	
R4107		ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R4108		ERDS2TJ680	C.RESISTOR 1/4W 68	1	
R4109		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R4110		EROS2CKG2403	M.RESISTOR 1/4W 240K	1	
R4111		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4112		ERDS2TJ680	C.RESISTOR 1/4W 68	1	
R4113,14		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	2	
R4115		ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R4116		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R4117		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4118		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R4121		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R4123		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R4124		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R4150		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R4201		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R4202		ERJ6GEYJ100	M.RESISTOR CH 1/10W 10	1	
R4203		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R4204		ERJ6GEYJ121	M.RESISTOR CH 1/10W 120	1	
R4205		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R4206		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R4207		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R4208-13		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	6	
R4501		ERJ6GMYG821	M.RESISTOR CH 1/10W 820	1	
R4502		ERJ6GMYG681	M.RESISTOR CH 1/10W 680	1	
R4503		ERJ6GMYG821	M.RESISTOR CH 1/10W 820	1	
R4504		VRE0034E112	M.RESISTOR CH 1/10W 1.1K	1	
R4505		ERJ6GMYG103	M.RESISTOR CH 1/10W 10K	1	
R4506		ERJ6GMYG183	M.RESISTOR CH 1/10W 18K	1	
R4507		ERJ6GMYG562	M.RESISTOR CH 1/10W 5.6K	1	
R4508		ERJ6GMYG104	M.RESISTOR CH 1/10W 100K	1	
R4510		ERJ6GMYG561	M.RESISTOR CH 1/10W 560	1	
R4511		ERJ6GMYG303	M.RESISTOR CH 1/10W 30K	1	
R4512		VRE0034E113	M.RESISTOR CH 1/10W 11K	1	
R4513		ERJ6GMYG103	M.RESISTOR CH 1/10W 10K	1	
R4514		ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	1	
R4515		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R4516		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R4517		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4520		ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R4521		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R4522		ERJ6GMYJ225	M.RESISTOR CH 1/10W 2.2M	1	
R4523		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R4525,26		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	2	
R4527		VRE0034E104	M.RESISTOR CH 1/10W 100K	1	
R4528		VRE0034E393	M.RESISTOR CH 1/10W 39K	1	
R4529		ERJ6GEYG123	M.RESISTOR CH 1/10W 12K	1	
R4530		ERJ6GMYJ334	M.RESISTOR CH 1/10W 330K	1	
R4533		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R4535		ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R4536		ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R4537		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4539		ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R4540		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4541		ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	1	
R4551		ERJ6GMYG821	M.RESISTOR CH 1/10W 820	1	
R4552		ERJ6GMYG681	M.RESISTOR CH 1/10W 680	1	
R4553		ERJ6GMYG821	M.RESISTOR CH 1/10W 820	1	
R4554		VRE0034E112	M.RESISTOR CH 1/10W 1.1K	1	
R4555		ERJ6GMYG103	M.RESISTOR CH 1/10W 10K	1	
R4556		ERJ6GMYG183	M.RESISTOR CH 1/10W 18K	1	
R4557		ERJ6GMYG562	M.RESISTOR CH 1/10W 5.6K	1	
R4558		ERJ6GMYG104	M.RESISTOR CH 1/10W 100K	1	
R4560		ERJ6GMYG561	M.RESISTOR CH 1/10W 560	1	
R4561		ERJ6GMYG303	M.RESISTOR CH 1/10W 30K	1	
R4562		VRE0034E912	M.RESISTOR CH 1/10W 9.1K	1	
R4563		VRE0034E49B	M.RESISTOR 1/10W	1	
R4564		ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	1	
R4565		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R4566		ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R4567		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R4570,71		ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	2	
R4573		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4574		ERJ6GMYJ560	M.RESISTOR CH 1/10W 56	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R4575		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4576		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4577		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R4901		ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	1	
R4902		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R4903		ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	1	
R4904		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R4905		ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	1	
R4906		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R4907		ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	1	
R4908		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R4909		ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	1	
R4910		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R4911		ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	1	
R4912		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R4913		ERJ6GEYJ183	M.RESISTOR CH 1/10W 18K	1	
R4914		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R4915,16		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	2	
R4917,18		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	2	
R4919,20		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	2	
R4921,22		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	2	
R4923,24		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R4925,26		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	2	
R4927,28		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	2	
R4929,30		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R4931,32		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	2	
R4935,36		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R4937		ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	1	
R4938		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R4940		ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	1	
R4941		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R4942		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R5001		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R5002		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R5003-05		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	3	
R5006		ERJ6GEYJ183	M.RESISTOR CH 1/10W 18K	1	
R5007		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R5008		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R5009		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R5010		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R5011		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R5012-14		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	3	
R5015		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R5016		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R5017		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R5018		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R5019		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R5020		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R5021		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R5022		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R5023		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R5024		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R5025		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R5026		ERJ6GEYJ391	M.RESISTOR CH 1/10W 390	1	
R5027		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R5028		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R5029		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R5030		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R5031		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R5033-35		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	3	
R5036,37		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	2	
R5038		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R5039		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R5040		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R5041		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R5042		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R5043		ERJ6GEYJ123	M.RESISTOR CH 1/10W 12K	1	
R5044		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R5045		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R5046-48		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	3	
R5049		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R5050		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R5051		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R5052		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R5053		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R5054		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R5055,56		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R5057		ERJ6GEYJ123	M.RESISTOR CH 1/10W 12K	1	
R5058		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R5060,61		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R6001		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R6003		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R6004		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R6005		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R6006,07		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R6008		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6009		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R6010,11		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	2	
R6016		ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R6017		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R6018		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R6019		ERJ6GMYJ121	M.RESISTOR CH 1/10W 120	1	
R6020		ERG2SJ150	M.RESISTOR 2W 15	1	
R6021		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6023		ERD2FCVG220	C.RESISTOR 2W 22	1	
R6028		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R6029		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R6030		ERJ6GMYG103	M.RESISTOR CH 1/10W 10K	1	
R6031		ERJ6GMYG242	M.RESISTOR CH 1/10W 2.4K	1	
R6032		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R6033		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R6034		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R6035		ERSF30JR90		1	
R6036		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R6038		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R6039,40		ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	2	
R6042		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R6043,44		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R6045,46		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	2	
R6047		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R6048-50		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	3	
R6051,52		ERJ6GMYJ564	M.RESISTOR CH 1/10W 560K	2	
R6054		ERJ6GMYK395	M.RESISTOR CH 1/10W 3.9M	1	
R6055		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R6056		ERJ6GMYJ124	M.RESISTOR CH 1/10W 120K	1	
R6057		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R6058		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R6059		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R6060		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R6061		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R6062,63		ERJ6GMYJ564	M.RESISTOR CH 1/10W 560K	2	
R6064-66		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	3	
R6067		ERJ6GMYJ154	M.RESISTOR CH 1/10W 150K	1	
R6068		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R6069		ERJ6GMYK395	M.RESISTOR CH 1/10W 3.9M	1	
R6071		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R6072		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R6073-75		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	3	
R6076		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R6077,78		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	2	
R6079		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6080		ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R6081,82		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R6083		ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R6084		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R6085		ERJ6GMYJ184	M.RESISTOR CH 1/10W 180K	1	
R6087		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6088		ERJ6GMYJ184	M.RESISTOR CH 1/10W 180K	1	
R6089		ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R6090		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6091		ERJ6GMYJ154	M.RESISTOR CH 1/10W 150K	1	
R6092		ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R6093		ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R6094-98		ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	5	
R6101		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R6102		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R6105		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R6106		ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R6107,08		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R6109		ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R6110		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6111		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R6112		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6113		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R6114		ERJ6GMYJ124	M.RESISTOR CH 1/10W 120K	1	
R6115		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R6119-22		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	4	
R6123		ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R6128,29		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	2	
R6130,31		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	2	
R6132		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R6133,34		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	2	
R6135		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6136,37		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	2	
R6138		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R7324		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R7329		ERJ6GEYJ123	M.RESISTOR CH 1/10W 12K	1	
R7331		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R7332		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R7333		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R7334		ERD2FCG220	C.RESISTOR 2W 22	1	
R7335		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R7336		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R7337		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R7381		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R7382-86		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	5	
R7388		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R7390,91		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R7393		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R7394		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R7671,72		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	2	
R7673		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R7674		ERJ6GEYJ124	M.RESISTOR CH 1/10W 120K	1	
R7675		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R7676		ERG1SJ152	M.RESISTOR 1W 1.5K	1	
R7677		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R7678		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R7679		ERDS2TJ100	C.RESISTOR 1/4W 10	1	
R7680		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R7681,82		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	2	
R7683		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R7684		ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	1	
R7685		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7691		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R7694		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R7901		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R7902		ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R7903		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R7904		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R7905		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R7906		ERJ6GEYJ824	M.RESISTOR CH 1/10W 820K	1	
R8301		ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	1	
R8302		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R8303,04		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R8305,06		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	2	
R8307		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	
R8308		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R8309		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R8310		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R8311		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R8312		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R8313		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R8314		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R8315,16		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	2	
			SWITCHES		
SW3901		VSS0157	SWITCH	1	
			TRANSFORMERS		
T703		EIV5EC041A	TRANSFORMER	1	
T704		EIV5EC042A	TRANSFORMER	1	
T711		EIV5EC043A	TRANSFORMER	1	
T713		EIS5EC007A	TRANSFORMER	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
T851		ELM7Q207A	COIL	1	
T4001		EIQ7QF013Q	TRANSFORMER	1	
T7302		EIS5EC005A	TRANSFORMER	1	
T7303		EIS5EC011A	TRANSFORMER	1	
			THERMISTORS		
TH3301		ERTD2FIK154	THERMISTOR	1	
			VARIABLE RESISTORS		
VR301		EVNDXAA00B13	V.RESISTOR 1K	1	
VR302		EVND1AA00B13	V.RESISTOR 1K	1	
VR303		EVN49CA00B52	V.RESISTOR 500	1	
VR701		EVNDXAA00B53	V.RESISTOR 5K	1	
VR703		EVNDXAA00B23	V.RESISTOR 2K	1	
VR741		EVNDXAA00B14	V.RESISTOR 10K	1	
VR751,52		EVNDXAA00B53	V.RESISTOR 5K	2	
VR801		EVND1AA00B14	V.RESISTOR 10K	1	
VR2001		EVNDXAA00B54	V.RESISTOR 50K	1	
VR2006		EVNDXAA00B15	V.RESISTOR 100K	1	
VR2009,10		EVN58AA00B25	V.RESISTOR 200K	2	
VR2011		EVNDXAA00B15	V.RESISTOR 100K	1	
VR2013		EVNDXAA00B23	V.RESISTOR 2K	1	
VR2018,19		EVNDXAA00B15	V.RESISTOR 100K	2	
VR3001		EVNDXAA00B23	V.RESISTOR 2K	1	
VR3002		EVMF6SA00B25	V.RESISTOR	1	
VR3301		EVN4YCA00B13	V.RESISTOR 1K	1	
VR3302		EVNDRAA00B24	V.RESISTOR 20K	1	
VR4001		EVNDXAA00B14	V.RESISTOR 10K	1	
VR4002		EVNDXAA00B25	V.RESISTOR 200K	1	
VR4004		EVNDXAA00B53	V.RESISTOR 5K	1	
VR4501		EVN3DCA00B14	V.RESISTOR 10K	1	
VR4502		EVN3ACA00B24	V.RESISTOR 20K	1	
VR4503		EVNDRAA00B23	V.RESISTOR 2K	1	
VR4505		EVND1AA00B14	V.RESISTOR 10K	1	
VR4507		EVN3ACA00B24	V.RESISTOR 20K	1	
VR4509		EVN3DCA00B53	V.RESISTOR 5K	1	
VR4510		EVMF6SA00B25	V.RESISTOR	1	
VR4512		EVND1AA00B22	V.RESISTOR 200	1	
VR5001		EVNDXAA00B14	V.RESISTOR 10K	1	
VR5002		EVND1AA00B54	V.RESISTOR 50K	1	
VR5003		EVNDXAA00B24	V.RESISTOR 20K	1	
VR5004,05		EVN49CA00B52	V.RESISTOR 500	2	
VR7303		EVNDRAA00B14	V.RESISTOR 10K	1	
VR8301		EVMF6SA00B52	V.RESISTOR	1	
VR8302		EVNDRAA00B13	V.RESISTOR 1K	1	
			CRYSTAL OSCILLATORS		
X701		EFCH38MGS4	CRYSTAL OSCILLATOR	1	
X702		EFCT5M65MW3	CRYSTAL OSCILLATOR	1	
X709		VSX0483	CRYSTAL OSCILLATOR	1	
X717		EFCS5R5MS5	FILTER	1	
X730		EFCA39R50M1	CRYSTAL OSCILLATOR	1	
X731		EFCA6504BF	CRYSTAL OSCILLATOR	1	
X801		VSX0406	CRYSTAL OSCILLATOR	1	
X2201		VSX0225	CRYSTAL OSCILLATOR	1	
X3301		VSX0316	CRYSTAL OSCILLATOR	1	
X3303		VSX0099	CRYSTAL OSCILLATOR	1	
X6001		VSX0306	CRYSTAL OSC.	1	
X6002		VSQ0565	CRYSTAL OSCILLATOR	1	
X7302		EFCS5R5MS5	FILTER	1	
			MISCELLANEOUS		
		VSC1068	HEAT SINK	1	FOR Q6011
		VSC1323	HEAT SINK	1	FOR Q1001
		ENC17960	RF CONVERTER	1	<!>
		VJH0559	RF CONVERTER JACK PLATE	1	<!>
		VJF0442	CLAMPER	1	
		VMC0075	HEAT SINK FIX SPRING	1	FOR IC2206
		VSC2734	HEAT SINK	1	FOR IC2206
		VWJ0392	FLEXIBLE CARD CABLE 18P	1	P1505-P2202
		VMZ0905	INSULATION SHEET	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
		VMZ1352	HEAT SINK COVER	1	FOR SERVO PACK C.B.A.
		VJF0368	SERVO PACK SUPPORT	2	FOR SERVO PACK C.B.A.
		VJF0368	LUMI. & CHRO. PACK SUPPORT	2	FOR LUMI. &CHRO. PACK
		VSC2908	SHIELD COVER (TOP)	1	FOR HQ PACK C.B.A.
		VSC2909	SHIELD COVER (MAIN)	1	FOR HQ PACK C.B.A.
		VSC2910	SHIELD COVER (BOTTOM)	1	FOR HQ PACK C.B.A.
		VJF0368	HQ PACK SUPPORT	2	FOR HQ PACK C.B.A.
		VMZ1526	INSULATION SHEET	1	FOR HQ PACK C.B.A.
		VJR0164	PACK PIN 10P	3	FOR INPUT/OUTPUT PACK
		VEJ0908	REAR JACK	1	FOR INPUT/OUTPUT PACK
		VGU2707	SWITCH KNOB	1	FOR INPUT/OUTPUT PACK
		VJR0161	PACK PIN 7P	1	FOR INPUT/OUTPUT PACK
		VSC3500	SHIELD COVER (TOP)	1	FOR TV DEMODULATOR
		VSC3242	SHIELD COVER (MAIN)	1	FOR TV DEMODULATOR
		VSC3502	SHIELD COVER (BOTTOM)	1	FOR TV DEMODULATOR
		VSC2717	SHIELD COVER (MAIN)	1	FOR SIF PACK C.B.A
		VWJ0357	FLEXIBLE CARD 15P	1	P1504-P6001
	■	VEP03639D	LUMINANCE & CHROMINANCE SEPARATION C.B.A.		(NLA)
			CAPACITORS		
C3701		ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C3703		ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C3705		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3706		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3707		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3709		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C3710,11		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3713,14		ECEA1AK470	E.CAPACITOR 10V 47U	2	
C3715		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3716		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C3717		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3718		ECEA1EK3R3	E.CAPACITOR 25V 3.3U	1	
C3719		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C3721		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3722		ECUM1H332KBN	C.CAPACITOR CH 50V 3300P	1	
C3723		ECEA0JU101	E.CAPACITOR 6.3V 100U	1	
C3724		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3726		ECEA1CU101	E.CAPACITOR 16V 100U	1	
C3727		ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C3728		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C3729		ECUM1H120JCN	C.CAPACITOR CH 50V 12P	1	
C3733		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3734		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C3736		ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C3737-40		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	4	
C3741		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3742		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3743		ECEA0JU101	E.CAPACITOR 6.3V 100U	1	
C3746		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3747,48		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	2	
C3749		ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C3750-52		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C3753		ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
C3754		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C3755		ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C3756,57		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3758		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C3759		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3760		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C3762		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3763		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3764		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C3765,66		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3767		ECUM1H471KBN	C.CAPACITOR CH 50V 470P	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C3768		ECEA1CU221	E.CAPACITOR 16V 220U	1	
C3771-73		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C3777,78		ECEA1CK470	E.CAPACITOR 16V 47U	2	
C3781		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3782		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3783		ECUM1H080DCN	C.CAPACITOR CH 50V 8OP	1	
C3784		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3785		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C3799		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C3801		ECEA1HSN010	E.CAPACITOR 50V 1U	1	
C3802		ECEA1HKSR22	E.CAPACITOR 50V 0.22U	1	
C3803		ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C3804		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3805		ECEA1HKSR22	E.CAPACITOR 50V 0.22U	1	
C3806-11		ECEA1EKS3R3	E.CAPACITOR 25V 3.3U	6	
C3812		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3813		ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C3814		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3815,16		ECEA1CKS100	E.CAPACITOR 16V 10U	2	
C3817-19		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C3820,21		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	2	
C3822		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C3823		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3824,25		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
			DIODES		
D3701		MA151WK	DIODE	1	
D3703,04		1SS99	DIODE	2	
D3705		MA4100L	DIODE	1	
			DELAY LINES		
DL3701		VLD0177	DELAY LINE	1	
			FILTERS		
FL3701		VLF0760	FILTER	1	
FL3702		VLF0766	FILTER	1	
FL3705		ELB4S041	FILTER	1	
FL3706-08		ELB4Q072	FILTER	3	
FL3801		ELB4R046	FILTER	1	
FL3802,03		VLF0523	FILTER	2	
FL3804,05		VLF0526	FILTER	2	
			INTEGRATED CIRCUITS		
IC3701,02		M52055FP	IC	2	
IC3703		AN607P	IC	1	
IC3704		AN3916	IC	1	
IC3705		CX22013	IC	1	
IC3706		AN608P	IC	1	
IC3707		AN607P	IC	1	
IC3708		AN608P	IC	1	
IC3801,02		CXL1009P	IC	2	
			COILS		
L3701		VLQEL05F101K	COIL 100UH	1	
L3702		VLQEL05F330K	COIL 33UH	1	
L3704,05		VLQEL05F101K	COIL 100UH	2	
L3713		VLQEL05F390K	COIL 39UH	1	
L3714		VLQEL06F101K	COIL 100UH	1	
L3716		VLQEL05F101K	COIL 100UH	1	
L3719,20		VLQEL05F8R2K	COIL 8.2UH	2	
L3801		VLP0053	COIL	1	
			CONNECTORS		
P3701		VJP1231T	CONNECTOR (MALE) 4P	1	
P3703		VJP1237T	CONNECTOR (MALE) 10P	1	
P3704		VJP1231R	CONNECTOR (MALE) 4P	1	
PJ3701		VJP2775	CONNECTOR (MALE)	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
PJ3702		VJP2778	CONNECTOR (MALE)	1	
PK3801		VJS2775	CONNECTOR (FEMALE)	1	
PK3802		VJS2778	CONNECTOR (FEMALE)	1	
			TRANSISTORS		
Q3701		2SC2295	TRANSISTOR	1	
Q3702		2SB709	TRANSISTOR CHIP	1	
Q3703		2SD601	TRANSISTOR CHIP	1	
Q3704		2SC2295	TRANSISTOR	1	
Q3705		2SB709	TRANSISTOR CHIP	1	
Q3706,07		2SC2295	TRANSISTOR	2	
Q3708		2SB709	TRANSISTOR CHIP	1	
Q3709		2SC2295	TRANSISTOR	1	
Q3710		2SD601	TRANSISTOR CHIP	1	
Q3711		2SC2295	TRANSISTOR	1	
Q3712		2SB709	TRANSISTOR CHIP	1	
Q3713,14		2SC2295	TRANSISTOR	2	
Q3715		2SB709	TRANSISTOR CHIP	1	
Q3716		2SC2295	TRANSISTOR	1	
Q3717		2SA1022	TRANSISTOR CHIP	1	
Q3718		2SC2295	TRANSISTOR	1	
Q3719-21		2SD601	TRANSISTOR CHIP	3	
Q3722		2SC2295	TRANSISTOR	1	
Q3723		2SB709	TRANSISTOR CHIP	1	
Q3724		2SC2295	TRANSISTOR	1	
Q3725,26		2SD601	TRANSISTOR CHIP	2	
Q3728		2SC2295	TRANSISTOR	1	
Q3729-31		2SD601	TRANSISTOR CHIP	3	
Q3733,34		2SD601	TRANSISTOR CHIP	2	
Q3801		2SC2295	TRANSISTOR	1	
Q3802-04		2SB709	TRANSISTOR CHIP	3	
			RESISTORS		
R3701		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R3702		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R3703,04		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R3705		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3706		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3707		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3708		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R3709		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R3710		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3712		ERJ6GEYJ123	M.RESISTOR CH 1/10W 12K	1	
R3713		ERJ6GEYJ183	M.RESISTOR CH 1/10W 18K	1	
R3714		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3715		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3716		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R3717		ERJ6GEYJ181	M.RESISTOR CH 1/10W 180	1	
R3718		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R3719		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	
R3720		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3721		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R3722		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3723		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3724		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3725		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R3727		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3728		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3729		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R3730		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	
R3731		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3732		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R3737		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3738		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3739		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R3740		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3741		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3742		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3743		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3744		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R3745		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R3746		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R3747		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3748		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R3749		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3750		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R3751,52		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R3753		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3754		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	
R3755		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3756		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3757		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3758		ERJ6GEYJ183	M.RESISTOR CH 1/10W 18K	1	
R3759,60		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R3761		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R3763		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R3764,65		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R3766		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R3767		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R3768		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R3769		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3770		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R3771,72		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R3774		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R3775		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3776,77		ERJ6GEYJ391	M.RESISTOR CH 1/10W 390	2	
R3778		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R3779		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	
R3780		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R3781		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3782		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R3783		ERJ6GEYJ151	M.RESISTOR CH 1/10W 150	1	
R3784		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3785		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3786		ERJ6GEYJ121	M.RESISTOR CH 1/10W 120	1	
R3787		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3788		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R3789		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R3791		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3793,94		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R3795,96		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	2	
R3797		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R3798		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3799		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3801		ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R3802-04		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	3	
R3805,06		ERJ6GEYJ224	M.RESISTOR CH 1/10W 220K	2	
R3807		ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R3808		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R3809		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R3810		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R3811		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R3812		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3813,14		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	2	
			SWITCHES		
SW3701		ESD14314	SWITCH	1	
			THERMISTORS		
TH3701,02		ERTD2WHL102S	THERMISTOR	2	
			VARIABLE RESISTORS		
VR3701		EVN4YCA00B24	V.RESISTOR 20K	1	
VR3702		EVN4YCA00B53	V.RESISTOR 5K	1	
VR3703-05		EVN4YCA00B23	V.RESISTOR 2K	3	
VR3706-09		EVN4YCA00B13	V.RESISTOR 1K	4	
			CRYSTAL OSCILLATORS		
X3801		VSX0323	CRYSTAL OSCILLATOR	1	
			MISCELLANEOUS		

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
		VMZ1527	INSULATION SHEET	1	
		VSC2928	SHIELD COVER (TOP/BOTTOM)	2	FOR CCD PACK C.B.A.
		VSC2929	SHIELD COVER (MAIN)	1	FOR CCD PACK C.B.A.
	■	VEP03677A	SUB LUMINNACE & CHROMINANCE		(NLA)
			C.B.A.		
			CAPACITORS		
C3501		ECEA1HKS010	E.CAPACITOR 50V 1U	1	
C3502		ECEA1CKS470	E.CAPACITOR 16V 47U	1	
C3503		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3504		ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C3505		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3506		ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C3507		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3508		ECEA1HKSR22	E.CAPACITOR 50V 0.22U	1	
C3509,10		ECEA1EKS3R3	E.CAPACITOR 25V 3.3U	2	
C3511		ECEA0JSN470	E.CAPACITOR 6.3V 47U	1	
C3512,13		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C3514		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3515		ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C3516		ECEA1EKS3R3	E.CAPACITOR 25V 3.3U	1	
C3517,18		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	2	
C3519		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C3520,21		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3522		ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C3523		ECQP1H272JZ	P.CAPACITOR 50V 2700P	1	
C3524		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C3525		ECQV1H274JZ	P.CAPACITOR 50V 0.27U	1	
C3526		ECEA1AU221	E.CAPACITOR 10V 220U	1	
C3527		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C3528		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C3529		ECEA1EK3R3	E.CAPACITOR 25V 3.3U	1	
C3530		ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C3531		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C3532		ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C3533		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3534,35		ECUM1H470JCN	C.CAPACITOR CH 50V 47P	2	
C3536,37		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3538		ECEA1CK330	E.CAPACITOR 16V 33U	1	
C3539,40		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3541		ECEA1CK330	E.CAPACITOR 16V 33U	1	
C3542,43		ECEA1HK010	E.CAPACITOR 50V 1U	2	
C3544,45		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3546		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3547		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3548,49		ECEA1CK100	E.CAPACITOR 16V 10U	2	
C3550,51		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3552		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C3553,54		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3555		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C8502,03		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C8505-10		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	6	
C8511		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C8512		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C8513		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C8514		ECUM1H183KBN	C.CAPACITOR CH 50V 0.018U	1	
C8515		ECUM1E273KBN	C.CAPACITOR CH 25V 0.027U	1	
C8516		ECUM1H391KBN	C.CAPACITOR CH 50V 390P	1	
C8517		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C8518		ECUM1H390JCN	C.CAPACITOR CH 50V 39P	1	
C8519,20		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C8521		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C8522		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C8523		ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
			DIODES		
D3501		MA151K	DIODE	1	
D3502		MA153	DIODE	1	
			DELAYS		
DL8501		EFDRT325A12B	DELAY	1	
DL8502		VLD0079	DELAY	1	
			FILTERS		
FL3501,02		VLF0523	FILTER	2	
FL3503,04		VLF0526	FILTER	2	
FL3505		ELB4H054	FILTER	1	
			INTEGRATED CIRCUITS		
IC3501		TL8705P	IC	1	
IC3502		AN78L09	IC	1	
IC3503		UPC1517CA	IC	1	
IC3504		CXL1009P	IC	1	
IC3505		AN78L09	IC	1	
IC3506		M52055FP	IC	1	
IC8501		AN3594K	IC	1	
IC8503		BU5715F	IC	1	
			COILS		
L3501-04		VLQEL05F101K	COIL 100UH	4	
L3505		VLQEL05F100K	COIL 10UH	1	
L3506,07		VLQEL05F390K	COIL 39UH	2	
L3508,09		VLQEL05F101K	COIL 100UH	2	
L3510		VLP0053	COIL	1	
L8501		VLQEL05F101K	COIL 100UH	1	
L8503		VLQEL05F8R2K	COIL 8.2UH	1	
L8504,05		VLQEL05F150K	COIL 15UH	2	
L8506,07		VLQEL05F101K	COIL 100UH	2	
			CONNECTORS		
P3501		VJP1233T	CONNECTOR (MALE) 6P	1	
P3502		VJP1235T	CONNECTOR (MALE) 8P	1	
P3503		VJP1231T	CONNECTOR (MALE) 4P	1	
P3504		VJP2776	CONNECTOR (MALE)	1	
P3505		VJP2775	CONNECTOR (MALE)	1	
P3506		VJS2776	CONNECTOR (FEMALE)	1	
P3507		VJS2775	CONNECTOR (FEMALE)	1	
			TRANSISTORS		
Q3501,02		2SB709	TRANSISTOR CHIP	2	
Q3503		2SD601	TRANSISTOR CHIP	1	
Q3504		2SB709	TRANSISTOR CHIP	1	
Q3505,06		2SC2295	TRANSISTOR	2	
Q3507		2SB709	TRANSISTOR CHIP	1	
Q3508,09		2SC2295	TRANSISTOR	2	
Q3510		2SB709	TRANSISTOR CHIP	1	
Q8501		2SC2295	TRANSISTOR	1	
Q8502,03		2SD601	TRANSISTOR CHIP	2	
			RESISTORS		
R3501		ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R3502		ERJ6GEYJ224	M.RESISTOR CH 1/10W 220K	1	
R3503		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3504		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R3505		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R3506		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R3507		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R3508,09		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	2	
R3510		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R3511		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R3512		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3513		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R3514		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R3515		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R3516,17		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R3518		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R3519		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3520		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3521		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R3522		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R3523		ERTD2ZHL333S	THERMISTOR 33K	1	
R3524		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3525		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3526		ERJ6GEYJ124	M.RESISTOR CH 1/10W 120K	1	
R3527		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3528		ERJ6GEYJ183	M.RESISTOR CH 1/10W 18K	1	
R3529		ERJ6GEYJ123	M.RESISTOR CH 1/10W 12K	1	
R3530		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3531		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3532-35		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	4	
R3536,37		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R3538		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R8501		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R8502		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R8503		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R8504		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R8505		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R8506,07		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	2	
R8508		ERJ6GEYJ683	M.RESISTOR CH 1/10W 68K	1	
R8509		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R8510		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R8511		ERJ6GEYJ151	M.RESISTOR CH 1/10W 150	1	
R8512		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R8513		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R8514,15		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	2	
R8516		ERJ6GEYJ183	M.RESISTOR CH 1/10W 18K	1	
R8517		ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	1	
R8518,19		ERJ6GEYJ391	M.RESISTOR CH 1/10W 390	2	
R8520		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R8521		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R8522		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R8523		ERJ6GEYJ183	M.RESISTOR CH 1/10W 18K	1	
R8524		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
			VARIABLE RESISTORS		
VR3501		EVN4YCA00B13	V.RESISTOR 1K	1	
VR3502,03		EVN4YCA00B53	V.RESISTOR 5K	2	
VR8502,03		EVN4YCA00B13	V.RESISTOR 1K	2	
			CRYSTAL OSCILLATORS		
X3501		VSX0189	CRYSTAL OSCILLATOR	1	
X3502		VSX0323	CRYSTAL OSCILLATOR	1	
			MISCELLANEOUS		
		VSC2914	SHIELD COVER (TOP)	1	
		VSC2915	SHIELD COVER (MAIN)	1	
		VSC2916	SHIELD COVER (BOTTOM)	1	
		VMZ1527	INSULATION SHEET	1	
		VMZ1552	INSULATION SHEET	1	
		VSC2911	SHIELD COVER (TOP)	2	FOR 1H DELAY CCD PACK
		VSC2912	SHIELD COVER (MAIN)	1	FOR 1H DELAY CCD PACK
	■	VEP03743A	PAL/SECAM TRANSCODER C.B.A.		(NLA)
			CAPACITORS		

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C8001		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C8002		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C8003,04		ECEA1CKN100	E.CAPACITOR 16V 10U	2	
C8005		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C8006		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C8007		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C8008		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C8009		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C8010		ECEA1AU471	E.CAPACITOR 10V 470U	1	
C8011		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C8012-14		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	3	
C8015		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C8016-18		ECEA1CK100	E.CAPACITOR 16V 10U	3	
C8019		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C8020		ECEA1AU471	E.CAPACITOR 10V 470U	1	
C8021		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C8022		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C8023		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C8024		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C8025		ECEA1AKN470	E.CAPACITOR 10V 47U	1	
C8026-28		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	3	
C8029		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C8030-32		ECEA1CK100	E.CAPACITOR 16V 10U	3	
C8033		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C8034-36		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	3	
C8037		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C8038-40		ECEA1CK100	E.CAPACITOR 16V 10U	3	
C8041		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C8042		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C8043,44		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	2	
C8045		ECQP1H472JZ	P.CAPACITOR 50V 4700P	1	
C8046		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
C8047		ECQB1H472JH	P.CAPACITOR 50V 4700P	1	
C8048		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C8049,50		ECQV1H474JF	P.CAPACITOR 50V 0.47U	2	
C8051		ECCF1H101JC	C.CAPACITOR 50V 100P	1	
C8052		ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C8053		ECQB1H682JH	P.CAPACITOR 50V 6800P	1	
C8054		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C8055		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C8056		ECQV1H224JF	P.CAPACITOR 50V 0.22U	1	
C8059,60		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	2	
C8061		ECKF1H102KB	C.CAPACITOR 50V 1000P	1	
C8062		ECCF1H330JC	C.CAPACITOR 50V 33P	1	
C8063		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C8064		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C8065		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C8066		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C8067-69		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	3	
C8070		ECCF1H101JC	C.CAPACITOR 50V 100P	1	
C8071		ECCF1H391JU	C.CAPACITOR 50V 390P	1	
C8073		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C8074		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C8076		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C8077-79		ECKF1H102ZF	C.CAPACITOR 50V 1000P	3	
C8081		ECRHA030E41	TRIMMER 3P	1	
C8084		ECQV1H334JF	P.CAPACITOR 50V 0.33U	1	
C8085		ECEA25M6R8	E.CAPACITOR 25V 6.8U	1	
C8086		ECQV1H334JF	P.CAPACITOR 50V 0.33U	1	
C8087		ECEA25M6R8	E.CAPACITOR 25V 6.8U	1	
C8088,89		ECCF1H151JCB	C.CAPACITOR 50V 150P	2	
C8090		ECQB1H223JH	P.CAPACITOR 50V 0.022U	1	
C8091		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C8092		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C8093		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C8094		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C8095		ECQB1H223JH	P.CAPACITOR 50V 0.022U	1	
C8096		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C8097		ECRHA030E41	TRIMMER 3P	1	
C8098		ECQV1H473JZ	P.CAPACITOR 50V 0.047U	1	
C8099		ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C8100		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C8101		ECKF1H221KB	C.CAPACITOR 50V 220P	1	
C8102		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C8103		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C8104		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C8105		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C8106		ECKF1H102KB	C.CAPACITOR 50V 1000P	1	
C8107		ECQV1H474JF	P.CAPACITOR 50V 0.47U	1	
C8108		ECCF1H181JC	C.CAPACITOR 50V 180P	1	
C8109-12		ECQV1H224JF	P.CAPACITOR 50V 0.22U	4	
C8113		ECQB1H392JH	P.CAPACITOR 50V 3900P	1	
C8114		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C8115		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C8116		ECQV1H684JF	P.CAPACITOR 50V 0.68U	1	
C8117		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C8118		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C8119		ECKF1H821KB	C.CAPACITOR 50V 820P	1	
C8120		ECCF1H121JC	C.CAPACITOR 50V 120P	1	
C8121		ECQV1H474JF	P.CAPACITOR 50V 0.47U	1	
C8122,23		ECQV1H474JZ	P.CAPACITOR 50V 0.47U	2	
C8124		ECCF1H820JC4	C.CAPACITOR 50V 82P	1	
C8125		ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C8126		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C8127,28		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C8129		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C8130		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C8131		ECEA1AK101	E.CAPACITOR 10V 100U	1	
C8132		ECEA1EKN3R3	E.CAPACITOR 25V 3.3U	1	
C8133		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	1	
C8134		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C8135,36		ECEA1CK100	E.CAPACITOR 16V 10U	2	
C8137		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C8138		ECCF1H121JC	C.CAPACITOR 50V 120P	1	
C8139		ECCF1H181JC	C.CAPACITOR 50V 180P	1	
			DIODES		
D8002		MA165VT	DIODE	1	
D8003		MA4082H	DIODE	1	
D8004		1SS99	DIODE	1	
D8005-08		MA165VT	DIODE	4	
D8009		MA154WK	DIODE	1	
D8010		MA165VT	DIODE	1	
D8011		MA165	DIODE	1	
			DELAYS		
DL8001,02		VLD0116	DELAY	2	
			FILTERS		
FL8002		VLF0786	FILTER	1	
FL8003		VLF0762	FILTER	1	
FL8004		EIR7QG021Q	FILTER	1	
FL8005		VLF0764	FILTER	1	
FL8006		VLF0760	FILTER	1	
FL8007		VLF0766	FILTER	1	
FL8008		EIR7QG022Q	FILTER	1	
			INTEGRATED CIRCUITS		
IC8001		M52055P	IC	1	
IC8002,03		TA7348P	IC	2	
IC8004		VCR0281	IC	1	
IC8005-08		TA7348P	IC	4	
IC8009		BU5739S	IC	1	
IC8010		UPD74HC123AC	IC	1	
IC8011		AN6914	IC	1	
IC8012		TDA2594	IC	1	
IC8013		TDA3592A	IC	1	
IC8014		TDA2507	IC	1	
IC8015		TDA4510	IC	1	
IC8016		TDA2506	IC	1	
IC8017		M52055P	IC	1	
			COILS		
L8001		VLQ0398	COIL	1	
L8002-06		VLQEL05F101K	COIL 100UH	5	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
L8007		EIF7QG001Q	COIL	1	
L8008		VLQEL05F100K	COIL 10UH	1	
L8009		EIK7QG001B	COIL	1	
L8010		VLQEL05F8R2K	COIL 8.2UH	1	
L8011		EIK7EG014B	COIL	1	
L8012,13		VLQEL05F101K	COIL 100UH	2	
L8014		VLQEL05F8R2K	COIL 8.2UH	1	
L8015		EIK7EG015B	COIL	1	
L8016		VLQEL05F101K	COIL 100UH	1	
L8017		EIK7QG002Q	COIL	1	
L8018		VLQEL05F100K	COIL 10UH	1	
L8019		VLQEL05F101K	COIL 100UH	1	
L8021		VLQEL05S101K	COIL 100UH	1	
			CONNECTORS		
P8001		VJP1511R	CONNECTOR (MALE)	1	
P8002		VJP1238T	CONNECTOR (MALE) 11P	1	
P8003		VJP1236T	CONNECTOR (MALE) 9P	1	
P8004		VJP1235T	CONNECTOR (MALE) 8P	1	
P8005		VJP1235R	CONNECTOR (MALE) 8P	1	
P8006,07		VJP1231T	CONNECTOR (MALE) 4P	2	
P8008		VJP1233T	CONNECTOR (MALE) 6P	1	
P8009		VJP1931T	CONNECTOR (MALE)	1	
			TRANSISTORS		
Q8001		2SD636	TRANSISTOR	1	
Q8002		2SC2206	TRANSISTOR	1	
Q8003		2SB641	TRANSISTOR	1	
Q8004		2SC2206	TRANSISTOR	1	
Q8005-07		2SB641	TRANSISTOR	3	
Q8008		2SC2206	TRANSISTOR	1	
Q8010,11		2SD636	TRANSISTOR	2	
Q8012		2SB641	TRANSISTOR	1	
Q8013		2SC2206	TRANSISTOR	1	
Q8015,16		2SD636	TRANSISTOR	2	
Q8017,18		2SB641	TRANSISTOR	2	
Q8019,20		2SC2206	TRANSISTOR	2	
Q8021-23		2SD636	TRANSISTOR	3	
Q8024		2SB641	TRANSISTOR	1	
Q8025,26		2SD636	TRANSISTOR	2	
Q8028		2SD636	TRANSISTOR	1	
Q8030		2SD636	TRANSISTOR	1	
Q8031		2SB641	TRANSISTOR	1	
Q8032		2SC2206	TRANSISTOR	1	
Q8033,34		2SD636	TRANSISTOR	2	
Q8035		2SB641	TRANSISTOR	1	
			COMBINATION PARTS		
QR8001,02		UN1213	TRANSISTOR-RESISTOR	2	
QR8004-08		UN1213	TRANSISTOR-RESISTOR	5	
QR8009-11		UN1211	TRANSISTOR-RESISTOR	3	
QR8013		UN1113	TRANSISTOR-RESISTOR	1	
QR8014		UN1211	TRANSISTOR-RESISTOR	1	
QR8015		UN1213	TRANSISTOR-RESISTOR	1	
QR8016,17		UN1113	TRANSISTOR-RESISTOR	2	
QR8018		UN1213	TRANSISTOR-RESISTOR	1	
			RESISTORS		
R8002		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R8004		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R8005		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R8006		EROS2CKG2201	M.RESISTOR 1/4W 2.2K	1	
R8007		EROS2CKG2001	M.RESISTOR 1/4W 2K	1	
R8008,09		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	2	
R8010		EROS2CKG2201	M.RESISTOR 1/4W 2.2K	1	
R8011		EROS2CKG2001	M.RESISTOR 1/4W 2K	1	
R8012		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R8013		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R8014		EROS2CKG5100	M.RESISTOR 1/4W 510	1	
R8015		EROS2CKG3301	M.RESISTOR 1/4W 3.3K	1	
R8016		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R8017		EROS2CKG1001	M.RESISTOR 1/4W 1K	1	
R8018		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R8019		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R8020		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R8021		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R8022		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R8023,24		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R8026-29		ERDS2TJ103	C.RESISTOR 1/4W 10K	4	
R8030-32		ERDS2TJ271	C.RESISTOR 1/4W 270	3	
R8033		ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R8034,35		ERDS2TJ473	C.RESISTOR 1/4W 47K	2	
R8036		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R8037		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R8038		ERDS2TJ273	C.RESISTOR 1/4W 27K	1	
R8039		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R8041,42		ERDS2TJ682	C.RESISTOR 1/4W 6.8K	2	
R8043		ERDS2TJ124	C.RESISTOR 1/4W 120K	1	
R8044		EROS2CKG1202	M.RESISTOR 1/4W 12K	1	
R8045		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R8046		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R8047		ERDS2TJ185	C.RESISTOR 1/4W 1.8M	1	
R8048		ERDS2TJ225	C.RESISTOR 1/4W 2.2M	1	
R8049		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R8050		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R8051		ERDS2TJ683	C.RESISTOR 1/4W 68K	1	
R8052		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R8053		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R8054		ERDS2TJ183	C.RESISTOR 1/4W 18K	1	
R8055		ERD2FCG100	C.RESISTOR 10	1	
R8056		ERD2FCG120	C.RESISTOR 2W 12	1	
R8057		ERDS2TJ823	C.RESISTOR 1/4W 82K	1	
R8058		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R8060		ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
R8062		ERDS2TJ682	C.RESISTOR 1/4W 6.8K	1	
R8063		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R8064		ERDS2TJ183	C.RESISTOR 1/4W 18K	1	
R8065		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R8066		ERDS2TJ391	C.RESISTOR 1/4W 390	1	
R8067		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R8068		ERDS2TJ683	C.RESISTOR 1/4W 68K	1	
R8069		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R8070		ERDS2TJ183	C.RESISTOR 1/4W 18K	1	
R8071		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R8072		EROS2CKG2001	M.RESISTOR 1/4W 2K	1	
R8074		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R8079		ERDS2TJ391	C.RESISTOR 1/4W 390	1	
R8080,81		ERDS2TJ330	C.RESISTOR 1/4W 33	2	
R8082,83		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R8084		ERDS2TJ822	C.RESISTOR 1/4W 8.2K	1	
R8085		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R8086		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R8087		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R8088		EROS2CKG5101	M.RESISTOR 1/4W 5.1K	1	
R8089		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R8090		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R8091		ERDS2TJ681	C.RESISTOR 1/4W 680	1	
R8092		ERDS2TJ182	C.RESISTOR 1/4W 1.8K	1	
R8093		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R8094		ERDS2TJ682	C.RESISTOR 1/4W 6.8K	1	
R8095,96		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	2	
R8097		ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R8098		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R8099		ERDS2TJ391	C.RESISTOR 1/4W 390	1	
R8100		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R8101		ERDS2TJ183	C.RESISTOR 1/4W 18K	1	
R8102		ERDS2TJ822	C.RESISTOR 1/4W 8.2K	1	
R8103		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R8104		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R8105		EROS2CKG4700	M.RESISTOR 1/4W 470	1	
R8106		EROS2CKG5601	M.RESISTOR 1/4W 5.6K	1	
R8107,08		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R8109		ERDS2TJ470	C.RESISTOR 1/4W 47	1	
R8110		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R8111		EROS2CKG7500	M.RESISTOR 1/4W 750	1	
R8112		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R8113		ERDS2TJ682	C.RESISTOR 1/4W 6.8K	1	
R8114		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R8115		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R8116		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R8117		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R8118		ERDS2TJ391	C.RESISTOR 1/4W 390	1	
R8119-22		ERDS2TJ750	C.RESISTOR 1/4W 75	4	
R8123		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R8124		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R8126		ERDS2TJ182	C.RESISTOR 1/4W 1.8K	1	
R8128		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R8129		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R8130,31		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R8132,33		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	2	
R8134		EROS2CKG2201	M.RESISTOR 1/4W 2.2K	1	
R8135		EROS2CKG2001	M.RESISTOR 1/4W 2K	1	
R8136		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R8137		ERDS2TJ682	C.RESISTOR 1/4W 6.8K	1	
R8138		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R8139		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R8140,41		ERDS2TJ101	C.RESISTOR 1/4W 100	2	
R8142		ERDS2TJ331	C.RESISTOR 1/4W 330	1	
R8143,44		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	2	
R8145		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R8146		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R8147,48		ERDS2TJ104	C.RESISTOR 1/4W 100K	2	
R8149		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R8150		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R8151		EROS2CKG1502	M.RESISTOR 1/4W 15K	1	
R8152		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
			VARIABLE RESISTORS		
VR8001		EVN4YCA00B24	V.RESISTOR 20K	1	
VR8002		EVN4YCA00B13	V.RESISTOR 1K	1	
VR8003		EVN4YCA00B53	V.RESISTOR 5K	1	
VR8004		EVN4YCA00B23	V.RESISTOR 2K	1	
VR8005		EVN4YCA00B52	V.RESISTOR 500	1	
VR8006,07		EVN4YCA00B53	V.RESISTOR 5K	2	
VR8008		EVN4YCA00B23	V.RESISTOR 2K	1	
			CRYSTAL OSCILLATORS		
X8001		VSX0225	CRYSTAL OSCILLATOR	1	
X8002		VSX0066	CRYSTAL OSCILLATOR	1	
			MISCELLANEOUS		
		VKC0271	HINGE CLIP	2	
		VMX0985	SPACER	2	
	■	VEP03744A	SECAM CHROMINANCE C.B.A.		(NLA)
			CONNECTORS		
BP8501		VJP2904	CONNECTOR (MALE)	1	
			CAPACITORS		
C1301,02		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C1303		ECKF1H102KB	C.CAPACITOR 50V 1000P	1	
C1304		ECEA1CU221	E.CAPACITOR 16V 220U	1	
C8519		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C8520,21		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C8522		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C8523		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C8524		ECQV1H223JS	P.CAPACITOR 50V 0.022U	1	
C8525		ECEA1AK470	E.CAPACITOR 10V 47U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C8526		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C8527		ECCF1H270JC	C.CAPACITOR 50V 27P	1	
C8528		ECCF1H271JS	C.CAPACITOR 50V 270P	1	
C8529		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C8530		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C8531		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C8532		ECCF1H101JC	C.CAPACITOR 50V 100P	1	
C8533,34		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C8535		ECEA1CK330	E.CAPACITOR 16V 33U	1	
C8536		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C8537		ECEA1OM47	E.CAPACITOR 10V 47U	1	
C8538		ECQV1H563JZ	P.CAPACITOR 50V 0.056U	1	
C8539		ECEA1CK330	E.CAPACITOR 16V 33U	1	
C8540,41		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C8542		ECKF1H561KB	C.CAPACITOR 50V 560P	1	
C8543-46		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	4	
C8548		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C8549		ECCF1H221JCB	C.CAPACITOR 50V 220P	1	
C8550,51		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
C8552		ECCF1H330JC	C.CAPACITOR 50V 33P	1	
C8553		ECKF1H561KB	C.CAPACITOR 50V 560P	1	
C8554		ECQB1H332JH	P.CAPACITOR 50V 3300P	1	
C8555		ECQB1H272JH	P.CAPACITOR 50V 2700P	1	
C8556		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C8557,58		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	2	
			DIODES		
D1301		MA165VT	DIODE	1	
			FILTERS		
FL8503		VLF0645	FILTER	1	
FL8504		VLF0647	FILTER	1	
FL8505		VLF0643	FILTER	1	
FL8506		VLF0644	FILTER	1	
FL8507		VLF0646	FILTER	1	
FL8508		VLF0648	FILTER	1	
FL8509		VLF0143	FILTER	1	
FL8510		VLF0649	FILTER	1	
			INTEGRATED CIRCUITS		
IC8501		BA7107S	IC	1	
IC8502		BA7025L	IC	1	
			COILS		
L8509-12		VLQEL05F101K	COIL 100UH	4	
L8513		VLQEL05F221K	COIL 220UH	1	
L8514		VLQEL05F120K	COIL 12UH	1	
L8515		VLQEL05F221K	COIL 220UH	1	
L8516		VLQEL05F680K	COIL 68UH	1	
L8517		VLQEL05F102K	COIL 1000UH	1	
L8518		VLQEL07F822J	COIL 8200UH	1	
			CONNECTORS		
P1301		VJP1393T	CONNECTOR (MALE) 13P	1	
P8009		VJS1931T	CONNECTOR (FEMALE)	1	
			TRANSISTORS		
Q1301		2SD1474	TRANSISTOR	1	
Q1302		2SD639	TRANSISTOR	1	
Q1303,04		2SD636-Q	TRANSISTOR	2	
Q8504		2SB641	TRANSISTOR	1	
Q8505,06		2SC2206	TRANSISTOR	2	
Q8508-10		2SC2206	TRANSISTOR	3	
Q8511-13		2SD636	TRANSISTOR	3	
Q8514		2SB641	TRANSISTOR	1	
			COMBINATION PARTS		
QR8501		UN1119	TRANSISTOR-RESISTOR	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
QR8502		UN1211	TRANSISTOR-RESISTOR	1	
			RESISTORS		
R1301		ERDS2TJ391	C.RESISTOR 1/4W 390	1	
R1302		ERDS2TJ183	C.RESISTOR 1/4W 18K	1	
R1303		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R1304		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R1305		EROS2CKG2701	M.RESISTOR 1/4W 2.7K	1	
R1306		EROS2CKG3902	M.RESISTOR 1/4W 39K	1	
R1307		EROS2CKG2001	M.RESISTOR 1/4W 2K	1	
R8517		ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
R8518		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R8519		ERDS2TJ821	C.RESISTOR 1/4W 820	1	
R8520		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R8521		ERDS2TJ822	C.RESISTOR 1/4W 8.2K	1	
R8522,23		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R8524		EROS2CKG4702	M.RESISTOR 1/4W 47K	1	
R8525		ERDS2TJ224	C.RESISTOR 1/4W 220K	1	
R8526		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R8527		ERDS2TJ331	C.RESISTOR 1/4W 330	1	
R8528		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R8529		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R8530		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R8535		ERDS2TJ154	C.RESISTOR 1/4W 150K	1	
R8536		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R8537		ERDS2TJ390	C.RESISTOR 1/4W 39	1	
R8538		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R8539		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R8540		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R8541		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R8542		ERDS2TJ681	C.RESISTOR 1/4W 680	1	
R8543		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R8544		ERDS2TJ821	C.RESISTOR 1/4W 820	1	
R8545		ERDS2TJ680	C.RESISTOR 1/4W 68	1	
R8546		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R8547		ERDS2TJ331	C.RESISTOR 1/4W 330	1	
R8548-51		ERDS2TJ102	C.RESISTOR 1/4W 1K	4	
R8552		ERDS2TJ681	C.RESISTOR 1/4W 680	1	
R8554		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R8555,56		ERDS2TJ123	C.RESISTOR 1/4W 12K	2	
R8557		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R8558,59		ERDS2TJ123	C.RESISTOR 1/4W 12K	2	
R8560		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R8562		ERDS2TJ271	C.RESISTOR 1/4W 270	1	
R8564		EROS2CKG4702	M.RESISTOR 1/4W 47K	1	
R8565		ERTD2ZIL154S	THERMISTOR 150K	1	S
R8566		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R8567		ERDS2TJ273	C.RESISTOR 1/4W 27K	1	
R8568		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R8569		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R8570		ERDS2TJ273	C.RESISTOR 1/4W 27K	1	
R8571		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R8572		ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
R8573		ERDS2TJ821	C.RESISTOR 1/4W 820	1	
R8574		EROS2CKG1002	M.RESISTOR 1/4W 10K	1	
R8575		EROS2CKG5101	M.RESISTOR 1/4W 5.1K	1	
R8576		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R8577		ERDS2TJ392	C.RESISTOR 1/4W 3.9K	1	
R8578		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R8579		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R8580		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R8581		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
			COILS		
T8501		ELM7Q207A	COIL	1	
			VARIABLE RESISTORS		
VR8501,02		EVN32CA00B13	V.RESISTOR 1K	2	
			MISCELLANEOUS		
		VKC0271	HINGE CLIP	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
		VSC3090	HEAT SINK	1	
	■	VEP05149A	HEAD AMP C.B.A.		(NLA)
			CAPACITORS		
C501		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C502,03		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C504		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C505		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C507,08		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C509		ECUM1H332KBN	C.CAPACITOR CH 50V 3300P	1	
C511		ECUM1E473ZFN	C.CAPACITOR CH 25V 0.047U	1	
C513		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C514		ECEA1CK220	E.CAPACITOR 16V 22U	1	
C515		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C516		VCYE1C104MR1	S.CAPACITOR 16V 0.1U	1	
C517		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
C518		ECUM1H080DCN	C.CAPACITOR CH 50V 8P	1	
C519,20		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C523		ECUM1H040CCN	C.CAPACITOR CH 50V 4P	1	
C524,25		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	2	
C526		ECUM1H050DCN	C.CAPACITOR CH 50V 5P	1	
C527		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C530		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C531		ECUM1H060DCN	C.CAPACITOR CH 50V 6P	1	
C532		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
C533		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C534		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C535		VCYE1C104MR1	S.CAPACITOR 16V 0.1U	1	
C536		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C537		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C551		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C552		ECEA1CKE101	E.CAPACITOR 16V 100U	1	
C553		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C555-59		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	5	
C560		ECEA0JPK470	E.CAPACITOR 6.3V 47U	1	
C561		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C562,63		ECUM1H471KBN	C.CAPACITOR CH 50V 470P	2	
C564,65		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	2	
C566		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C567		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C569		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
			DIODES		
D501,02		MA165VT	DIODE	2	
			INTEGRATED CIRCUITS		
IC501		AN3334K	IC	1	
IC502		VCR0271	IC	1	
IC551		BA7740FS	IC	1	
			COILS		
L502		VLQ0188K330	COIL 33UH	1	
L504		VLQEL05F101K	COIL 100UH	1	
L505		VLQ0188K330	COIL 33UH	1	
L506		VLQ0188K6R8	COIL 6.8UH	1	
L551,52		VLQEL05F101K	COIL 100UH	2	
L553,54		VLQ0213K2R2	COIL 2.2UH	2	
			CONNECTORS		
P501		VJP1250T	CONNECTOR (MALE) 10P	1	
P502		VJS2603	CONNECTOR (FEMALE)	1	
P551		VJP1236T	CONNECTOR (MALE) 9P	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
			TRANSISTORS		
Q501		2SB709	TRANSISTOR CHIP	1	
			RESISTORS		
R501		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R502		ERJ6GMYJ474	M.RESISTOR CH 1/10W 470K	1	
R503		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R507		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R508		ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R510		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R512		ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	1	
R513		ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R514		ERJ6GMYJ100	M.RESISTOR CH 1/10W 10	1	
R515,16		ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	2	
R517,18		ERJ6GMYJ100	M.RESISTOR CH 1/10W 10	2	
R519		ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R520		ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	1	
R521		ERJ6GMYJ100	M.RESISTOR CH 1/10W 10	1	
R522		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R523		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R551,52		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	2	
R554		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R555		ERJ6GMYJ243	M.RESISTOR CH 1/10W 24K	1	
R556		ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R557		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R558		ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R559		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R560		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R561,62		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	2	
R563		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R564		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R565		ERJ6GMYJ100	M.RESISTOR CH 1/10W 10	1	
R566,67		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	2	
R568		ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
			VARIABLE RESISTORS		
VR501,02		EVND1AA00B23	V.RESISTOR 2K	2	
			MISCELLANEOUS		
		VSC2668	SHIELD COVER (TOP)	1	
		VSC2669	SHIELD COVER (BOTTOM)	1	
		VSC2670	SHIELD COVER (MAIN)	1	
	■	VEP06595A	VR C.B.A.		(NLA)
			CAPACITORS		
C6503		ECEA1AKS330	E.CAPACITOR 10V 33U	1	
C6504		ECEA1EKS3R3	E.CAPACITOR 25V 3.3U	1	
C6505		ECEA1CKS330	E.CAPACITOR 16V 33U	1	
C6507		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6508,09		ECQV1H124JS	P.CAPACITOR 50V 0.12U	2	
C6510		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
			DIODES		
D6501		LN21RCPHL	LED	1	
D6502-05		MA165VT	DIODE	4	
			INTEGRATED CIRCUITS		
IC6501		VCR0172	IC	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
			CONNECTORS		
J6301		VJJ0192	CONNECTOR	1	
J6302		VJJ0210	CONNECTOR	1	
P6501		VJP1249T	CONNECTOR (MALE) 9P	1	
P6502		VJS2357A015	CONNECTOR (FEMALE)	1	
P6503		VJP1930T	CONNECTOR (MALE)	1	
P6504		VJP1242T	CONNECTOR (MALE) 2P	1	
P6506		VJP1246T	CONNECTOR (MALE) 6P	1	
			RESISTORS		
R6501		ERJ6GEYG162	M.RESISTOR CH 1/10W 1.6K	1	
R6502		ERJ6GEYG201	M.RESISTOR CH 1/10W 200	1	
R6503		ERJ6GEYG162	M.RESISTOR CH 1/10W 1.6K	1	
R6504		ERJ6GEYG201	M.RESISTOR CH 1/10W 200	1	
R6505		ERJ6GEYG113	M.RESISTOR CH 1/10W 11K	1	
R6506		ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	1	
R6507		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
			SWITCHES		
SW6501		EVQQS307K	SWITCH	1	
SW6514		VSS0187	SWITCH	1	
SW6518,19		VSS0284	SWITCH	2	
			VARIABLE RESISTORS		
VR3004		EWAKFKXB3B24	V.RESISTOR 20K	1	
VR6501		EWAKABXB3C23	V.RESISTOR 2K	1	
VR6503		EWANYGX05J24	V.RESISTOR 20K	1	
			MISCELLANEOUS		
		KL04	LED SPACER	1	
		VYC0160	REC VR PANEL UNIT	1	
		VGU4495	REC VR KNOB	2	
		VJF0691	JACK HOLDER	1	
		VGU4827	SWITCH KNOB	3	
	■	VEP07530H	TIMER C.B.A.		(NLA)
			CAPACITORS		
C7501		ECRHA030E41	TRIMMER 3P	1	
C7502		ECUM1H080DCN	C.CAPACITOR CH 50V 80P	1	
C7503		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C7504		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C7505		ECEA0JK221	E.CAPACITOR 6.3V 220U	1	
C7506		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C7507		ECEA1HKR22	E.CAPACITOR 50V 0.22U	1	
C7508		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7509		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C7510		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C7511		ECEA1VU221	E.CAPACITOR 35V 220U	1	
C7512		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C7513		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C7514		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C7520		ECEA0JK330	E.CAPACITOR 6.3V 33U	1	
C7521		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C7522		ECUM1H223ZFN	C.CAPACITOR CH 50V 0.022U	1	
C7523,24		ECEA1EKS4R7	E.CAPACITOR 25V 4.7U	2	
C7525		ECUM1H821JCN	C.CAPACITOR CH 50V 820P	1	
			DIODES		

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
D7501		MA3068	DIODE	1	
D7502		MA73	DIODE	1	
D7507		MA73	DIODE	1	
D7509		MA73	DIODE	1	
D7511		MA73	DIODE	1	
D7513		MA73	DIODE	1	
D7516,17		MA73	DIODE	2	
D7530		MA73	DIODE	1	
D7532-42		MA73	DIODE	11	
D7551		LN48YCPL	DIODE	1	
D7552,53		LN28RCPL	DIODE	2	
D7554		VLL0055	DIODE	1	
D7555		LN28RCPL	DIODE	1	
D7556		LN38GCPL	DIODE	1	
D7557		LN28RCPL	DIODE	1	
D7559		LN28RCPL	DIODE	1	
D7560		MA73	DIODE	1	
D7563,64		LN38GCPL	DIODE	2	
			DISPLAY TUBES		
DP7501		VSL0145	DISPLAY TUBE	1	
			INTEGRATED CIRCUITS		
IC7501		MN187125VFI	IC	1	
IC7502		MN12261	IC	1	
IC7503		MN1280L	IC	1	
IC7504		MN1280S	IC	1	(S)
IC7505		BA6810S	IC	1	
			COILS		
L7501		VLQEL05F221K	COIL 220UH	1	
P7501		VJS3136B006Z	CONNECTOR (FEMALE)	1	
P7502		VJS3136B013Z	CONNECTOR (FEMALE)	1	
P7503		VJS3136B011Z	CONNECTOR (FEMALE)	1	
P7505		VJS2357A020	CONNECTOR (FEMALE)	1	
P7506		VJS3136B008Z	CONNECTOR (FEMALE)	1	
P7507		VJP2621	CONNECTOR (MALE)	1	
P7509		VJS3136B010Z	CONNECTOR (FEMALE)	1	
P7511		VJP1244T	CONNECTOR (MALE) 4P	1	
			TRANSISTORS		
Q7501		2SD601	TRANSISTOR CHIP	1	
			COMBINATION PARTS		
QR7501		UN2213	TRANSISTOR-RESISTOR	1	
QR7502		UN2112	TRANSISTOR-RESISTOR	1	
QR7503		UN2113	TRANSISTOR-RESISTOR	1	
QR7505		UN2111	TRANSISTOR-RESISTOR	1	
QR7510,11		UN2112	TRANSISTOR-RESISTOR	2	
			RESISTORS		
R6701		ERJ6ENF1363	M.RESISTOR	1	
R7501		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R7502		ERJ6GEYJ224	M.RESISTOR CH 1/10W 220K	1	
R7503		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R7504		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R7505		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R7506		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R7507		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R7508-10		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	3	
R7511		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7512		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R7513		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R7514		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R7523-29		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	7	
R7531,32		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R7533		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R7534		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R7536		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R7538		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R7539		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R7540		ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R7541		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R7542-44		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	3	
R7546		ERJ6GEYJ390	M.RESISTOR CH 1/10W 39	1	
R7547		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R7550-56		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	7	
R7557		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R7558,59		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	2	
			COMBINATION PARTS		
RX7501		EXBF11E104J	COMBI.R-R	1	
RX7502		EXBF8E104J	COMBI.R-R	1	
			CRYSTAL OSCILLATORS		
X7501		VSX0140	CRYSTAL OSCILLATOR	1	
X7502		VSX0094	CRYSTAL OSCILLATOR	1	
			MISCELLANEOUS		
		VEK5791	IR RECEIVER UNIT	1	(NLA)
		VJF0693	FIP HOLDER	1	
		VJF0740	LED SPACER	1	
		VMD1342	LED SPACER	1	
	■	VEP06597A	JOG SHUTTLE C.B.A.		(NLA)
			DIODES		
D6701-03		LN38GCPP	LED	3	
			CONNECTORS		
P6701		VJS2621	CONNECTOR (FEMALE)	1	
			COMBINATION PARTS		
QR6701		UN1112	TRANSISTOR-RESISTOR	1	
			RESISTORS		
R6701		ERDS2TJ271	C.RESISTOR 1/4W 270	1	
R6702		EROS2CKG1002	M.RESISTOR 1/4W 10K	1	
R6703		EROS2CKG1802	M.RESISTOR 1/4W 18K	1	
R6704-06		EROS2CKG1801	M.RESISTOR 1/4W 1.8K	3	
R6707		EROS2CKG1002	M.RESISTOR 1/4W 10K	1	
R6708		ERDS2TJ681	C.RESISTOR 1/4W 680	1	
R6709		EROS2CKG9102	M.RESISTOR 1/4W 91K	1	
R6710		EROS2CKG1202	M.RESISTOR 1/4W 12K	1	
R6711		EROS2CKG6802	M.RESISTOR 1/4W 68K	1	
R6712		EROS2CKG3302	M.RESISTOR 1/4W 33K	1	
R6713		EROS2CKG5102	M.RESISTOR 1/4W 51K	1	
R6714		EROS2CKG1203	M.RESISTOR 1/4W 120K	1	
			SWITCHES		
SW6701		EVQQS307K	SWITCH	1	
			MISCELLANEOUS		
		VMX1652	LED SPACER	3	
		VSQ0651	JOG/SHUTTLE ENCODER	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
	■	VEP01381H	POWER C.B.A.		(NLA)<!>
			CAPACITORS		
C1101,02		ECQU2A224MN	P.CAPACITOR 250V 0.22U	2	
C1105		VCC0021	C.CAPACITOR	1	
C1108		VCC0021	C.CAPACITOR	1	
C1111		VCC0023	CAPACITOR	1	
C1112		ECOS2GA121G	E.CAPACITOR 400V 120U	1	
C1113		ECEA2GG010	E.CAPACITOR 400V 1U	1	
C1114		ECQE6473B11	P.CAPACITOR	1	
C1115		ECKD3D331KBN	C.CAPACITOR 2KV 330P	1	
C1116		ECQB1H682JZ	P.CAPACITOR 50V 6800P	1	
C1117		ECEA1HFE560	E.CAPACITOR 50V 56U	1	
C1118		ECQB1H103JZ	P.CAPACITOR 50V 0.01U	1	
C1119		ECQV1H334JF	P.CAPACITOR 50V 0.33U	1	
C1120		ECQP1101JZ	P.CAPACITOR 100V 100P	1	
C1121		ECEA1HFE121	E.CAPACITOR 50V 120U	1	
C1122,23		ECA1CFZ122	E.CAPACITOR 16V 1200U	2	
C1124		ECA1AFZ102	E.CAPACITOR 10V 1000U	1	
C1125		ECA0JFZ471	E.CAPACITOR 6.3V 470U	1	
C1126		ECEA1VFE820	E.CAPACITOR 35V 82U	1	
C1127		ECEA1HGE100	E.CAPACITOR 50V 10U	1	
C1128-30		ECEA1AGE101	E.CAPACITOR 10V 100U	3	
C1131		ECA1CFQ122	E.CAPACITOR 16V 1200U	1	
C1132-37		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	6	
C1138		ECEA1CGE100	E.CAPACITOR 16V 10U	1	
C1139		ECQV1H105JZ	P.CAPACITOR 50V 1U	1	
C1141		ECEA1HFE270	E.CAPACITOR 50V 27U	1	
			DIODES		
D1102-05		EM1B	DIODE	4	
D1106		VSD0002	DIODE	1	
D1107		AP01C	DIODE	1	
D1108		MA4030L	DIODE	1	
D1109		MA178	DIODE	1	
D1110		MA165VT	DIODE	1	
D1111		ERA22-02	DIODE	1	
D1112		FMLG12SP	DIODE	1	
D1113		10ELS2	DIODE	1	
D1114		FMBG14L	DIODE	1	
D1115		EK14	DIODE	1	
D1116		MA2160A	DIODE	1	
D1117		MA4130L	DIODE	1	
			INTEGRATED CIRCUITS		
IC1101		STRD6009E	IC	1	
IC1102		STK5392	IC	1	
IC1103		SE013E	IC	1	
			COILS		
L1101,02		ELF18D221F	COIL 220UH	2	
L1103		ELC07B009	COIL	1	
L1104,05		VLQEL06F101K	COIL 100UH	2	
L1106		ELC07B009	COIL	1	
			CONNECTORS		
P1101		VJP1930T	CONNECTOR (MALE)	1	
P1102		VJS2625	CONNECTOR (FEMALE)	1	
P1103		VJP1149	CONNECTOR (MALE)	1	
			TRANSISTORS		

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
Q1101		PC111AD	TRANSISTOR	1	
Q1102		2SD1330	TRANSISTOR	1	
			RESISTORS		
R1101		ERC12AGM334	S.RESISTOR 1/2W 330K	1	
R1102,03		ERDS1TJ563	C.RESISTOR 1/2W 56K	2	
R1104,05		ERDS2TJ474	C.RESISTOR 1/4W 470K	2	
R1106		ERG3ANJ683	M.RESISTOR 3W 68K	1	
R1107		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R1108		ERD2FTVG681	C.RESISTOR 1/4W 680	1	
R1109		ERDS2TJ121	C.RESISTOR 1/4W 120	1	
R1110		ERW1PK2R2	W.RESISTOR 1W 2.2	1	
R1111,12		ERG2SJ820	M.RESISTOR 2W 82	2	
R1113,14		ERG2SJ560	M.RESISTOR 2W 56	2	
R1115		ERG1SJ182	M.RESISTOR 1W 1.8K	1	
R1117		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R1118		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
			TRANSFORMERS		
T1101		VLT0591	TRANSFORMER	1	
			MISCELLANEOUS		
		VJF0318	FUSE HOLDER	4	
		VMZ1184	CAPACITOR COVER (B)	2	
	■	VEP01397A	AUDIO POWER C.B.A.		(NLA)<!>
			CAPACITORS		
C1251,52		ECEA1CPZ102	E.CAPACITOR 16V 1000U	2	
C1253		ECEA1CPZ471	E.CAPACITOR 16V 470U	1	
C1256		ECEA1CPZ221	E.CAPACITOR 16V 220U	1	
C1257		VCEA1CAE221	E.CAPACITOR 16V 220U	1	
C1258		ECEA1CPZ101	E.CAPACITOR 16V 100U	1	
C1259		VCEA1CAG100	E.CAPACITOR 16V 10U	1	
C1260		ECEA1CPZ102	E.CAPACITOR 16V 1000U	1	
C1261		ECEA1CPZ471	E.CAPACITOR 16V 470U	1	
C1262,63		ECQV1H474JZ	P.CAPACITOR 50V 0.47U	2	
C1270		ECCF1H150KC	C.CAPACITOR 50V 15P	1	
C1271,72		ECKF1H101KB	C.CAPACITOR 50V 100P	2	
			DIODES		
D1251		MA4062L	DIODE	1	(M,L)
D1252		EK04	DIODE	1	
D1256,57		MA165VT	DIODE	2	
			INTEGRATED CIRCUITS		
IC1251		RC4560DD	IC	1	
			COILS		
L1251,52		VLQ0407391K	COIL 390H	2	
			CONNECTORS		
P1251		VJP1221	CONNECTOR (MALE)	1	
P1253		VJP1243T	CONNECTOR (MALE) 3P	1	
			TRANSISTORS		
Q1251		2SB561	TRANSISTOR	1	
Q1252-54		2SD655EF	TRANSISTOR	3	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
			RESISTORS		
R1252		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R1254		ERDS2TJ331	C.RESISTOR 1/4W 330	1	
R1255		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R1256		ERDS2TJ821	C.RESISTOR 1/4W 820	1	
R1257		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R1258		ERDS2TJ822	C.RESISTOR 1/4W 8.2K	1	
R1259		ERDS2TJ105	C.RESISTOR 1/4W 1000K	1	
R1260		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R1261		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R1262		ERD2FCJ4R7	C.RESISTOR 4.7	1	
R1263		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R1264		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
	■	VEP00P38B	S-VHS TERMINAL C.B.A.		(NLA)
			CONNECTORS		
J3991,92		VJJ0161	CONNECTOR	2	
JG		VEK4589	EARTH LINE UNIT	1	#JG
			CONNECTORS		
P3901		VJP1244T	CONNECTOR (MALE) 4P	1	
P3902		VJP1244R	CONNECTOR (MALE) 4P	1	
			RESISTORS		
R3991,92		ERDS2TJ750	C.RESISTOR 1/4W 75	2	
	■	VEP00P23B	DRIVE PCB C.B.A.		(NLA)
			CAPACITORS		
C2901-03		ECEA1VSN2R2	E.CAPACITOR 35V 2.2U	3	
C2904-06		ECUM1E104KBM	C.CAPACITOR CH 25V 0.1U	3	
C2907		ECUM1E683KBM	C.CAPACITOR CH 25V 0.068U	1	
C2908		ECUM1E473KBM	C.CAPACITOR CH 25V 0.047U	1	
C2909		ECQV1H104JS	P.CAPACITOR 50V 0.1U	1	
C2910,11		ECEA1CKS100	E.CAPACITOR 16V 10U	2	
C2912		ECEA0JKS220	E.CAPACITOR 6.3V 22U	1	
			INTEGRATED CIRCUITS		
IC2901		AN3815K	IC	1	
			CONNECTORS		
P2901		VJP2603W	CONNECTOR (MALE)	1	
P2902		VJP1232T	CONNECTOR (MALE) 5P	1	
			RESISTORS		
R2901		ERX12SJR47	M.RESISTOR 1/2W 0.47	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
	■	VEP00K88C	FE HEAD AMP C.B.A.		(NLA)
			CAPACITORS		
C1401		ECEA1CK100	C.CAPACITOR 16V 10U	1	
			COMBINATION PARTS		
CR1401		EXED103Z333	CAPACITOR-RESISTOR	1	
			TRANSISTORS		
Q1401		2SD1991	TRANSISTOR	1	
			MISCELLANEOUS		
		VJP1148	CONNECTOR (MALE) 2P	1	
		VLQ0188J101	COIL 100UH	1	
		EIQ7QF012Q	COIL	1	
		VWJ0121	JAMPER	1	
	■	VEP00M86A	FG AMP C.B.A.		(NLA)
			CAPACITORS		
C1510		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C1511		ECUM1H104ZFM	C.CAPACITOR CH 50V 0.1U	1	
C1512		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C1513		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C1514		ECUM1H104ZFM	C.CAPACITOR CH 50V 0.1U	1	
			INTEGRATED CIRCUITS		
IC1501		UPC358G	IC	1	
			FILTERS		
L1510,11		VLP0083	FILTER	2	
			CONNECTORS		
P1505		VJS1456	CONNECTOR (FEMALE)	1	
P1506		VJS3193B015A	CONNECTOR (FEMALE)	1	
			RESISTORS		
R1510		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R1511		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R1512		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R1513-16		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	4	
R1517		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R1518		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R1519		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
	■	VXA3825	MECHANISM CONNECTION C.B.A.		(NLA)

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
			MISCELLANEOUS		
		VJS1493	CONNECTOR (FEMALE) 15P	1	
		ON2170-LF1	PHOTO COUPLER	2	
		VMZ1366	PROTECTION SHEET	1	
	■	VEK3578	PHOTO Tr. (S) C.B.A.		(NLA)
			MISCELLANEOUS		
		ECKZ1H102KB	C.CAPACITOR 50V 1000P	1	
		PN150NV	PHOTO TRANSISTOR	1	
		VMD0645	HOLDER	1	
	■	---------	PHOTO Tr. (T) C.B.A.		(NLA)
			MISCELLANEOUS		
		ECKZ1H102KB	C.CAPACITOR 50V 1000P	1	
		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
		PN150NV	PHOTO TRANSISTOR	1	
		VJS2165W	CONNECTOR (FEMALE) 6P	1	
		VMD0645	HOLDER	1	
	■	VEP66107A	REMOTE CONTROLLER(A) C.B.A.		(NLA)
			CAPACITORS		
C6802,03		ECUM1H221JN	C.CAPACITOR CH 50V 220P	2	
C6804		ECEA1HKS010	E.CAPACITOR 50V 1U	1	
C6805		ECEA1HKSR22	E.CAPACITOR 50V 0.22U	1	
C6806		ECUM1H473ZFN	C.CAPACITOR CH 50V 0.047U	1	
			DIODES		
D6801		LN66S	LED	1	
D6804-12		MA165VT	DIODE	9	
			INTEGRATED CIRCUITS		
IC6801		M34200V1AC	IC	1	
			TRANSISTORS		
Q6801		2SB709	TRANSISTOR CHIP	1	(Q,R,S)
Q6802-05		2SD601	TRANSISTOR CHIP	4	(Q,R,S)
Q6806		2SB709	TRANSISTOR CHIP	1	(Q,R,S)
Q6807,08		2SD601	TRANSISTOR CHIP	2	(Q,R,S)
			COMBINATION PARTS		
QR6801		UN1231	TRANSISTOR-RESISTOR	1	
QR6802,03		FA1L4M	TRANSISTOR-RESISTOR	2	
QR6804		FA1A4P	TRANSISTOR-RESISTOR	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
			RESISTORS		
R6801		ERDS2TJ3R9	C.RESISTOR 1/4W 3.9	1	
R6804		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R6806,07		ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	2	
R6808		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6809		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R6810		ERJ6GMYJ184	M.RESISTOR CH 1/10W 180K	1	
R6811		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6812		ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R6813		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R6814		ERJ6GMYJ184	M.RESISTOR CH 1/10W 180K	1	
R6815		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6816		ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R6817-21		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	5	
R6823		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R6824		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6825		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R6826		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6827		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R6828		ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R6831		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6835		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R6836,37		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	2	
			CRYSTAL OSCILLATORS		
X6801		VSX0179	CRYSTAL OSCILLATOR	1	
			MISCELLANEOUS		
		VJR0499	ELECTRODE (+)	1	
		VJR0500	ELECTRODE (-)	1	
	■	VEP66082A	REMOTE CONTROLLER(B) C.B.A.		(NIA)
			CAPACITORS		
C6801		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
			DIODES		
D6802,03		LN222RP	DIODE	2	
			RESISTORS		
R6802		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
			MISCELLANEOUS		
		VMX0469	FIP SPACER	2	
		VSQ0654	PHOTO SENSOR	1	